

EXHIBIT 67

Alaska Electrical Pension Fund, et al.
v. Pharmacia Corp., et al., No. 03-1519 (D.N.J.)
Expert Report Concerning Materiality, Loss Causation and
Damages

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June 7, 2011

I. Qualifications

1. I am the Samuel A. McCullough Professor of Finance in the Joseph M. Katz School of Business at the University of Pittsburgh. I teach graduate level courses in finance, including courses on business valuation, corporate restructuring, and corporate governance. I also am an affiliated professor of law in the School of Law at the University of Pittsburgh. I have published more than forty papers in academic journals and scholarly books, primarily in the field of corporate finance.

2. I was chief economist of the Securities and Exchange Commission (“SEC”) during 1987 to 1991 and deputy chief economist of the SEC during 1984 to 1985. One of my responsibilities as chief economist was to work with the SEC’s division of enforcement on matters involving alleged securities fraud. My staff and I were regularly asked to offer opinions as to whether particular information had material effects on the stock prices of publicly traded companies and, if so, to quantify this effect.

3. I received a B.A. in economics from Waynesburg College in 1975, an M.A. in economics from Miami University in 1976, and a Ph.D. in economics from Washington University in 1981. My curriculum vitae, including a list of testimony I have given in the past four years, is attached as Exhibit 1.

II. Assignment

4. Counsel for Pharmacia Corp. (“Pharmacia”) has asked me to form an opinion as to whether the alleged misrepresentations and omissions in this matter (i) were material, (ii) caused Pharmacia’s stock price to be inflated, and (iii) caused losses to investors in Pharmacia stock. I also have been asked to examine sales of Pharmacia common stock during the class period by individual defendants Carrie Cox (“Ms. Cox”) and Steven Geis (“Dr. Geis”) in the context of plaintiffs’ allegations.

III. Compensation

5. I am being compensated for my time spent on this case at a rate of \$950 per hour. I also receive periodic compensation from Cornerstone Research (“Cornerstone”), an economics consulting firm that is assisting me on this matter. The amount of compensation that I receive from Cornerstone is determined entirely at Cornerstone’s discretion. My understanding is that this compensation is based on the level of fees Cornerstone receives on matters in which they

provide support to me. I understand that this compensation is not based on the content of my opinions or the outcome of any matter.

IV. Materials Reviewed

6. I have reviewed various materials in this matter, including the Consolidated Complaint (“Complaint”), Plaintiffs’ Response to Defendants Pharmacia Corporation, Fred Hassan, G. Steven Geis, Carrie Cox, and Pfizer Inc.’s Second Set of Interrogatories (“Plaintiffs second interrogatory response”), other court filings, analyst reports, news stories, and stock price data for Pharmacia and other pharmaceutical companies. A list of the materials I reviewed is attached as Exhibit 2.

7. I previously submitted a report related to class certification issues in this matter on August 31, 2006 (“Class Certification Report”) in which I opined on certain issues regarding the materiality of plaintiffs’ allegations.

8. I reserve the right to supplement and revise my analyses, as appropriate, based on additional testimony, documents, or other discovery materials.

V. Summary of Opinions

9. I understand that plaintiffs allege that Pharmacia’s common stock price (“stock price”) was artificially inflated during the class period, April 17, 2000 to August 5, 2001, as a result of alleged misrepresentations regarding the results of the Celecoxib Long-Term Arthritis Safety Study (“CLASS study”), and that when the “truth” regarding the alleged misrepresentations was revealed, Pharmacia’s stock price declined. Based on my review of information that was in the public domain and event study analyses of Pharmacia’s stock price that I conducted, it is my opinion that there is no scientific basis to conclude that the alleged misrepresentations in this matter were material. Therefore, there is no scientific basis to conclude that the alleged misrepresentations caused Pharmacia’s stock price to be artificially inflated during the class period.

10. Based on the event study analyses of Pharmacia’s stock price on the alleged corrective disclosure dates that I conducted, it is my opinion that there is no scientific basis to conclude that plaintiffs suffered economic losses because of the alleged misrepresentations. Hence, in my opinion, plaintiffs are unable to establish loss causation in this matter. As a result, there is no scientific basis to support a conclusion that plaintiffs suffered economic damages.

11. My opinions are based on the following results from the event study analysis that I conducted:

12. The disclosure of information related to the alleged shortcomings in Pharmacia's presentation of CLASS study data on February 6, 2001 was not associated with a statistically significant change in Pharmacia's stock price. The discussion of the CLASS study data at the FDA's Arthritis Advisory Committee hearing on February 7, 2001 was not associated with a statistically significant change in Pharmacia's stock price.

13. Of the other dates on which Pharmacia allegedly made misleading disclosures related to the CLASS study, there was not a statistically significant change in Pharmacia's stock price on any of the dates on which new information relating to the plaintiffs' allegations concerning the CLASS study was released.

14. Although there was a statistically significant change in Pharmacia's stock on certain dates on which Pharmacia allegedly made misleading disclosures, no new information relating to the plaintiffs' allegations concerning the CLASS study was released on these days. In my opinion, the statistically significant change in Pharmacia's stock price on these days was likely caused by the release of other information on these days. There is no scientific basis to conclude that Pharmacia's stock price was inflated on these dates as a result of these allegedly misleading disclosures because all of the information disclosed was previously known.

15. The final allegedly curative disclosure in this matter, namely, the publication of an article in the August 5, 2001 issue of the *Washington Post* (the "*Post* article"), was not associated with a statistically significant change in Pharmacia's stock price.

16. Based upon the results of the event study analyses, I conclude that there is no scientific basis to conclude that Ms. Cox and Dr. Geis sold Pharmacia stock during the class period at stock prices that were artificially inflated because of the alleged misrepresentations.

VI. Background and Summary of Allegations

A. Background

17. It is my understanding that the CLASS study began in 1998 and was designed by G.D. Searle & Co. ("Searle"), the study's original sponsor (subsequently acquired by Pharmacia), to

test whether or not Celebrex, a drug in a class known as COX-2 inhibitors, caused fewer ulcers with complications than traditional non-steroidal anti-inflammatory drugs (“NSAIDs”).

18. During the period at issue in this case, Celebrex faced competition from another COX-2 inhibitor drug, Vioxx, which was manufactured and distributed by Merck. As the CLASS study was being conducted, Merck & Co., Inc. (“Merck”) was conducting a GI safety study for Vioxx.

19. The class period in this case begins on the first trading day following the initial announcement of the preliminary results of the CLASS study on Saturday, April 15, 2000, at the annual meeting of the American College of Physicians.¹ The presentation of the preliminary results explained that the CLASS study had failed to meet its “primary endpoint” of ulcer complications but that results for the secondary endpoint of ulcer complications and symptomatic ulcers were favorable as compared with the pooled set of patients taking either of two comparator NSAIDs, ibuprofen and diclofenac, at six months. Pharmacia issued a press release on the study’s findings on April 17, 2000.

20. The preliminary CLASS study results were presented at the Digestive Disease Week conference on May 22, 2000. Pharmacia issued a press release about this on May 23, 2000.

21. On June 13, 2000, Pharmacia submitted a supplemental new drug application to the Food and Drug Administration (“FDA”) seeking to modify the Celebrex label in light of the CLASS study. In general, that application asked the FDA to modify the standard gastrointestinal warning, which the FDA required to be included on all NSAIDs and COX-2 labels. That application included all of the data from the CLASS study.

22. An article on the CLASS study appeared in the *Journal of the American Medical Association* (“JAMA” and the “JAMA article”) on September 13, 2000. The article reiterated that Celebrex patients did not have statistically fewer ulcer complications (the primary endpoint) as compared with patients taking the comparator NSAIDs during the six-month treatment period. It also reiterated that there were fewer incidences of ulcer complications combined with symptomatic ulcers for Celebrex patients in the six-month treatment period.

23. The Complaint alleges that Pharmacia made materially false and misleading statements related to the CLASS study in quarterly conference calls on the following dates: April 25, 2000,

¹ Complaint, ¶36.

October 30, 2000, February 12, 2001, April 25, 2001, and July 25, 2001 (Complaint ¶¶39, 50, 52, 57, and 60). Among this set of announcements, Plaintiffs' second interrogatory response (no. 20) identifies only April 25, 2000 as a date on which an alleged misrepresentation occurred.

24. The FDA posted a "Briefing Book," prepared by Pharmacia and the FDA medical officers' reviews and reports related to Pharmacia's sNDA on its website on February 6, 2001. The medical officer reviews consisted of a Medical Offer Review, a Medical Officer's Gastroenterology Review, and a Statistical Review.² The Briefing Book and medical officer reviews discussed the six-month treatment period, the two-step protocol (Complaint ¶46(a) and (d)), and the primary and secondary endpoint issues that the Complaint alleges were materially false and misleading (Complaint, ¶46). CLASS study results that used a six-month treatment period and the entirety of the data were displayed in the documents posted on the FDA website.

25. The FDA's Arthritis Advisory Committee held a public hearing to consider Pharmacia's sNDA on February 7, 2001. Representatives of Pharmacia, FDA personnel and others discussed the CLASS study data and conclusions that could be drawn from the data. At the conclusion of the hearing, the Arthritis Advisory Committee voted to recommend to the FDA that it should deny Pharmacia's request for a change to the Celebrex label.

26. The FDA's Arthritis Advisory Committee held a public meeting on the GI safety study that Merck commissioned for Vioxx, a competitor drug to Celebrex, on February 8, 2001. In mid-afternoon on this date, the Committee indicated that it would recommend that Merck be allowed to modify Vioxx's label with data from its safety study.

27. On April 12, 2001, Pharmacia announced that the FDA had sent it an "approvable" letter, which allowed it to include certain CLASS study results on the Celebrex label if some conditions were met.

28. The *Washington Post* published a story on August 5, 2001 concerning the *JAMA* article, issues with the article's submission to *JAMA*, and conclusions reached by the FDA Arthritis Advisory Committee.

² Plaintiffs say, "Defendants' scheme almost came unraveled when the FDA posted the CLASS study data on its website." (Complaint, ¶8) "When the CLASS study data was posted on the FDA's website, questions began to arise. It appeared there were differences between the article Pharmacia had published in *JAMA* and the CLASS study data." (Complaint, ¶64)

29. The FDA approved the addition of the CLASS study results to the Celebrex label on June 7, 2002. In particular, two paragraphs of the former NSAID GI warning were replaced by two new paragraphs and a table of CLASS study results under “GI Effects” in the Warnings section of the label.³ The FDA used a nine-month treatment period for all the CLASS study results added to the label. The FDA reported outcomes for ulcer complications combined with symptomatic ulcers. The FDA also reported a subgroup analysis of non-aspirin users.

B. Summary of Allegations

30. The Complaint makes various assertions regarding allegedly “materially false and misleading” statements made during the class period. I understand that, during the course of discovery in this matter, defendants served interrogatories asking plaintiffs to identify the specific statements that they contend are false and misleading and to explain the basis for such contentions. Although the allegedly false and misleading statements identified by plaintiffs in the Complaint and in their interrogatory responses are the same, the latter offered different reasons than those offered in the Complaint as to why the statements were false and misleading.

31. Paragraph 46 of the Complaint alleges that “[t]he statements set forth in ¶¶36, 37, 39, 40–43, 45 [of the Complaint] were false and misleading as follows:

(a) The CLASS study trial was not one trial comparing Celebrex to diclofenac and ibuprofen as reported. Instead, the CLASS study consisted of two trials: one comparing Celebrex to diclofenac and a separate trial comparing Celebrex to ibuprofen;

(b) The CLASS study trial did not last six months as stated. Instead, the Celebrex versus ibuprofen trial lasted 15 months and the Celebrex versus diclofenac trial lasted 12 months;

(c) Prior to the trials, the protocol setting forth the criteria for the CLASS study indicated that Celebrex would be found superior to ibuprofen or diclofenac only if it caused statistically significantly fewer ulcer-related complications. After the trials were complete, defendants added symptomatic ulcers to the comparison criteria in order to improve Celebrex’s relative performance. Such post-hoc changes to the protocol violated standard scientific practice and misleadingly portrayed Celebrex’s GI safety;

³ Exhibit 3 shows the changes to the June 7, 2002 Celebrex label resulting from the CLASS study.

(d) Prior to beginning the trials, the CLASS study protocol called for a two-step procedure: (1) the incidence of GI side effects in the Celebrex group were to be compared to the incidence of GI side effects in the diclofenac and ibuprofen groups combined; and (2) the Celebrex group was then to be compared to the ibuprofen and diclofenac groups separately. The protocol explicitly specified that Celebrex would be found to be superior to traditional NSAIDs only if both comparisons were statistically significant and in favor of Celebrex. Even using six months of data, Celebrex was not superior to ibuprofen [sic; should be diclofenac, not ibuprofen]. As such, by the rules of its own study, Pharmacia could not claim that Celebrex was superior to traditional NSAIDs, but it did; and

(e) Analyzing the CLASS study data pursuant to original protocol, meaning 12 and 15 months of data compared head-to-head and in combination for ulcer-related complications, Celebrex does not offer greater GI safety than traditional NSAIDs. As such, defendants' claims that Celebrex had a superior GI safety profile were false and misleading.

32. In their interrogatory responses, plaintiffs claim that Defendants' statements "were false and misleading as they failed to disclose the following material facts:

1. That the entire study data was far less favorable to Celebrex than the publicly reported six-month data, with virtually every GI comparison worsening after six months;
2. That 85% of the complicated ulcers occurring after the first six months of the CLASS trial were suffered by patients being treated with Celebrex;
3. That the statistically significant benefit for Celebrex users not taking aspirin that defendants reported based upon six months of data for complicated ulcers did not hold for the entire study period;
4. That Celebrex failed to establish any statistically significant difference with diclofenac (one of the two comparator NSAIDs) on any of the eight GI endpoints considered; and
5. That diclofenac was actually numerically superior to Celebrex on one of the two co-primary endpoints of the study.⁴

⁴ Plaintiffs' Interrogatory Response at p. 12.

33. For purposes of summarizing information that was in the public domain, I partition the plaintiffs' explanations for why certain statements on the CLASS study were allegedly materially false and misleading into four categories. I label the categories "A," "B," "C," and "D" to correspond with the plaintiffs' categorization in Complaint ¶¶46, ¶¶68, and ¶31.⁵

A: Pooling. In ¶46(a) and (d), plaintiffs state that Pharmacia failed to report the results of separate statistical tests comparing Celebrex to ibuprofen and Celebrex to diclofenac, despite the fact that success on the separate tests is necessary for Celebrex to meet its primary endpoint under the CLASS study protocol. Instead, plaintiffs allege, Pharmacia reported only statistical tests comparing Celebrex to ibuprofen and diclofenac combined. This was the first, but only the first, of two steps in the protocol. In what I understand to be prospective study parlance, Pharmacia reported the "pooled" results but not the separate results. I will refer to this as the "pooling" issue.

B: Six-Month Treatment period. In ¶46 (b), plaintiffs state that Pharmacia reported results based on a six-month treatment period, but did not report results based on an analysis of the full period of collected data. Complaint ¶¶68 extends this criticism by alleging that there was "no scientifically justifiable reason" for reporting the six-month results at the exclusion of more collected data. I will refer to this as the "six-month treatment period" issue. Plaintiffs' second interrogatory response (no. 20, p. 7) elaborates: "The [April 17th press release]... failed to reveal that the results being reported were a truncated six-month analysis, which was far more favorable to Celebrex than the data that defendants had already analyzed for the entire study period of approximately 13 months."

C: Primary Endpoint. In ¶46(c), plaintiffs state that the CLASS study protocol specified that Celebrex would be found superior to ibuprofen or diclofenac only if it achieved statistical superiority in terms of fewer ulcer-related complications. Instead, plaintiffs say, Pharmacia added symptomatic ulcers to the comparison criteria "[a]fter the trials were complete." I will refer to this as the "primary endpoint" issue, as ulcer complications were the primary endpoint and symptomatic ulcers were a secondary endpoint.

D: Data Selection. As reflected in paragraph 32, above, in their interrogatory responses, plaintiffs claim that the Defendants omitted information about the CLASS study results in their initial presentations. I will refer to this as the "data selection" issue.

⁵ I view ¶46(e) to be a restatement of or consequence of ¶46(a–d).

34. In addition, Complaint ¶68 alleges that statements made by defendants in the *Washington Post* article on August 5, 2001 were “false and misleading as set forth in ¶46 and because there was no scientifically justifiable reason for excluding data from the CLASS study after six months.” I understand that the Third Circuit found that, prior to the August 5, 2001 *Washington Post* article, the market had not heard “storm warnings of possible fraud.”⁶ Specifically, the Third Circuit stated:

... [W]hile defendants had acknowledged in April 2000 that the study lasted 13 months, there was no indication that they deliberately withheld data from JAMA, or improperly massaged the data, until the Washington Post article in August 2001.

...

The totality of the evidence in the public realm as of February 2001 did not indicate a possibility of fraud or even hint at any malfeasance or intentional impropriety; rather, the evidence only supported the view that there existed a legitimate dispute over scientific and statistical models.... [W]e require some reason to suspect that defendants did not genuinely believe the accuracy of their statements. No such evidence surfaced until the publication of the Washington Post article which stated that defendants withheld data from JAMA.⁷

C. Framework of Analysis

35. In my opinion, the most appropriate way to assess whether the alleged misrepresentations are material is to test whether there was a statistically significant increase in Pharmacia’s stock price on the days the alleged misrepresentations occurred and/or whether there was a statistically significant decline in Pharmacia’s stock price on the days that the alleged truth about the alleged misrepresentations was revealed to the market. It also is my understanding that in order to prove loss causation in this case, plaintiffs must show that investors suffered losses when the alleged relevant truth about the alleged misrepresentations was revealed to the market. To inform my opinions regarding materiality and loss causation, I analyze whether there were statistically significant changes in Pharmacia’s stock price on the dates of the alleged misrepresentations and alleged corrective disclosures.

⁶ Third Circuit Opinion, January 30, 2009, p. 11.

⁷ Third Circuit Opinion, January 30, 2009, pp. 13–15.

36. In order to provide additional context and insight regarding how the market perceived certain announcements, I examine commentary by securities analysts who followed Pharmacia. Securities analysts are investment professionals who follow a specific company (or set of companies) closely. Their “primary responsibility” is:

“...the publication of regular written reports covering the investment attributes of specific companies. These research reports have several functions. First, they review new corporate information such as earnings announcements and management changes. Second, they suggest investment ideas for stocks in the analyst's industry, based, in part, on the new information. Third, they provide written earnings projections to the reader and present formal buy/sell recommendations to the firm's clients.”⁸

37. Hence, the views of securities analysts provide additional context that can inform an opinion as to whether information is material.

38. In sum, I find that there were no statistically significant stock price increases in Pharmacia’s stock price on the days on which plaintiffs allege in their interrogatory responses that the alleged misrepresentations occurred and there were no statistically significant declines in Pharmacia’s stock price on the days of the alleged corrective disclosures. Consequently, plaintiffs are unable to establish (i) that the alleged misrepresentations were material and (ii) loss causation. Therefore, there is no scientific basis to support a conclusion that plaintiffs suffered any economic damages as a result of the allegations in this case.

VII. Bases for Opinion

D. The Market for Pharmacia’s Common Stock Was Efficient

39. Plaintiffs claim that the market for Pharmacia’s stock was efficient and, accordingly, “the market for Pharmacia securities digested current information with respect to Pharmacia from all publicly available sources and reflected such information in Pharmacia’s stock prices.” (Complaint, ¶¶25, 78–79).

40. I interpret plaintiffs’ allegations to mean that the market for Pharmacia common stock is “semi-strong” efficient, meaning that all public information about Pharmacia was reflected in its stock price during the class period, and that new public information about Pharmacia was rapidly incorporated into its stock price throughout the class period.

⁸ Hooke, Jeffrey C., “Who Is Practicing Security Analysis?” *Security Analysis on Wall Street: A Comprehensive Guide to Today’s Valuation Methods*, 1998, Chapter 2.

41. The semi-strong version of market efficiency has been validated, as a general matter, by extensive empirical tests during the last 40 years, and it is widely embraced in the scientific literature in finance.⁹ As discussed in Brealey and Myers, “prices will adjust immediately to public information” in an efficient market.¹⁰ Brealey and Myers cite a study by Patell and Wolfson (1984), which examined how companies’ stock prices reacted to public announcements of earnings and dividends and found that “the major part of the adjustment in price occurs within 5 to 10 minutes of the announcement.”¹¹

42. For the purposes of my analyses, I adopt plaintiffs’ assumption that the market for Pharmacia common stock was efficient during the class period.

E. Event Study Methodology

43. To examine whether the alleged misrepresentations in this matter were material, I conducted an “event study analysis” of Pharmacia’s stock price on days on which the alleged misrepresentations and alleged corrective disclosures occurred. In addition, to determine whether plaintiffs suffered an economic loss because of the alleged misrepresentations, I conducted an event study analysis of Pharmacia’s stock price on days of alleged corrective disclosures. Event study analysis is commonly used in the academic literature to determine how stock prices of companies react to the announcement of various corporate events.¹² It also is used frequently in litigation to inform opinions regarding materiality and loss causation. I have

⁹ Brealey, Richard A., and Stewart C. Meyers, “Corporate Financing and the Six Lessons of Market Efficiency,” *Principles of Corporate Finance*, 7th Ed., 2003, Chapter 13.

¹⁰ Brealey, Richard A., and Stewart C. Meyers, 7th Ed., p. 351.

¹¹ Brealey, Richard A., and Stewart C. Meyers, 7th Ed., p. 353, citing Patell, James M., and Mark A. Wolfson, 1984, “The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements,” *Journal of Financial Economics*, Volume 13, pp. 223–252.

¹² For example: Chapter 4 of Campbell, Lo, and MacKinlay’s *The Econometrics of Financial Markets* in “Event Study Analysis,” Princeton University Press, 1997. Brealey, Richard A., and Stewart C. Myers, *Principles of Corporate Finance*, 6th Ed., 2000, Chapter 13, includes an introduction to event study analysis, see pp. 370–374. See also: Binder, John J., “The Event Study Methodology Since 1969,” *Review of Quantitative Finance and Accounting*, September 1998; Gilson, Ronald J., Charles J. Meyers, Marc & Eva Stern, and Bernard S. Black, “Event Studies: Measuring the Impact of Information,” *The Law and Finance of Corporate Acquisitions*, 1995, Chapter 6; Brown, Stephen J., and Jerold B. Warner, “Using daily stock returns: The case of event studies,” *Journal of Financial Economics*, Volume 14, 1985, pp. 3–31; and John J. Binder, “On the Use of the Multivariate Regression Model in Event Studies,” *Journal of Accounting Research*, Vol. 23, No. 1, Spring 1985, pp. 370–383.

used event study analysis extensively in my teaching, academic research, and litigation consulting. Appendix A contains a description of event study analysis.

F. Implementation of Event Study Methodology in this Matter

44. To perform event study analyses in this matter, I examined the relation between Pharmacia's stock returns and the stock returns of general market indices and Pharmacia's industry peers. I also reviewed the publicly available information on Pharmacia during the class period. My research shows that analysts and the business press covered Pharmacia extensively during the class period. I identified hundreds of analyst reports on Pharmacia and the industry and over 1,900 news articles on Pharmacia during the class period.

45. The control period I chose for the event study is the class period, April 17, 2000 to August 5, 2001.¹³ Plaintiffs allege that materially false and misleading statements were made on certain days ("Complaint Days") during the class period. Although many of the Complaint Days were not included as days of alleged misstatements or omissions in plaintiffs' second interrogatory response, I examine all of the Complaint Days in this report. To control for the Complaint Days in the regression model used in the event study analysis, I included indicator variables for the date of each Complaint Day, as well as the day before and the day after each Complaint Day.¹⁴ The indicator variables remove any influence that the Complaint Days might otherwise have had on the regression model's results. In this case, I used the NYSE Index ("NYSE index") and a Competitor Index of peer firms to control for movements in the market and peer company indexes during the control period.¹⁵

¹³ In my Class Certification Report, I performed an event study using the same general methodology but using the class period as defined in the Complaint. None of the conclusions in this report would change if I used my prior regression model instead of the current model.

¹⁴ Binder, John J., "On the Use of the Multivariate Regression Model in Event Studies," *Journal of Accounting Research*, Vol. 23, No. 1, Spring 1985, pp. 370–383.

¹⁵ The NYSE index is a comprehensive and widely known index of large companies traded on the New York Stock Exchange. The Competitor Index is an equal-weighted index comprised of Bristol-Myers Squibb Co., Eli Lilly & Co., Schering-Plough Corp., AstraZeneca plc, GlaxoSmithKline plc, Abbott Laboratories, Novartis AG, American Home Products Corp. and Johnson & Johnson. I did not include Pfizer and Merck in the Competitor Index because I thought that including those firms in the index might bias the event study away from finding Celebrex-related news to be associated with statistically significant residual stock returns. Pfizer co-markets Celebrex with Pharmacia, so good Celebrex-related news would be expected to move both stock prices upward. Merck markets Vioxx, a Cox-2 Inhibitor and competitor to Celebrex. Good news about Cox-2 Inhibitors would move Pharmacia and Merck's prices in the same direction; good news for Vioxx relative to Celebrex would be expected to move Pharmacia and

46. The difference between a stock's actual return and its predicted return on each event day is then calculated. This difference, referred to as the stock's "residual return," measures the degree to which the stock's actual return deviates from its expected return based on the returns of the market and industry indices, and the parameters estimated by the regression model. One then tests whether the residual return is significantly different from zero in a statistical sense. If the information released on a particular day is both new and material to investors, then the residual return on the event date should be significantly different from zero. The event study results are attached as Exhibit 4.¹⁶

VIII. Results from the Event Study Analysis

G. Event Study Analysis of Complaint Days and Those Days Identified In Response to Interrogatory No. 20 Related to the Presentation of CLASS Study Data

47. In this section, I discuss the events in the Complaint that relate to plaintiffs' allegations concerning the CLASS study. I also understand that a relevant article regarding the characteristics and results of the CLASS study were contained in the *New England Journal of Medicine* article published on November 23, 2000. Although this article is not mentioned specifically by plaintiffs, I also conducted an event study analysis of Pharmacia's stock price on this date in order to provide context regarding additional information related to the CLASS study that was publicly available. As discussed above, the alleged materially false and misleading statements in this case relate to issues involving (a) pooling (i.e., comparing Celebrex to ibuprofen or diclofenac together, as opposed to separately), (b) the six-month treatment period (i.e., reporting results based on a six-month treatment period as opposed to the entirety of the data), (c) the primary endpoint (i.e., reporting results for the secondary endpoint of ulcer complications and symptomatic ulcers as opposed to reporting results for the primary endpoint of ulcer complications), and (d) data selection. Each of the Complaint Days is analyzed along these four dimensions.

Merck's prices in the opposite direction. Although I think the exclusion of Pfizer and Merck from the Competitor Index is an appropriate and conservative choice, I checked whether including them changes the significance of any Complaint Days. Making this adjustment to the model does not change the significance of any of the Complaint Dates discussed in this report.

¹⁶ As a sensitivity analysis, I also examined a model using only the NYSE index to predict Pharmacia returns. The use of a model with only the NYSE index changes the significance of one Complaint Day, October 31, 2000. The price movement on this date becomes insignificant when a model using only the NYSE to predict Pharmacia returns is used.

1. April 17, 2000

48. The class period in this case begins on the first trading day following the initial announcement of the preliminary results of the CLASS study on Saturday, April 15, 2000, at the annual meeting of the American College of Physicians. Pharmacia issued a press release on the study's findings, which was reported in the public press as early as 8:12 a.m. on April 17, 2000. Plaintiffs allege that the press release "failed to reveal that the results being reported were a truncated six-month analysis, which was far more favorable to Celebrex than the data that defendants had already analyzed for the entire study period of approximately 13 months." (Plaintiffs' Interrogatory Response at pp. 7–8) Plaintiffs also refer to a JP Morgan report released on April 17, 2000 (Complaint, ¶37). In addition, on April 17, 2000, "The Pink Sheet" reports on a Pharmacia/Searle conference call.

49. The event study analysis finds that Pharmacia's residual return on April 17, 2000 is *negative* 0.43% and not statistically significant. This result is inconsistent with the plaintiffs' allegation that the April 15–17, 2000 announcements artificially inflated Pharmacia's stock price.

50. Between the April 15, 2000 and April 17, 2000 announcements on the preliminary results of the CLASS study, information related to the allegations was publicly released.

51. My review of the public press and analyst reports reveals that the following information had been disclosed publicly: (a) the primary endpoint of CLASS was ulcer complications, (b) Celebrex failed to meet the primary endpoint of CLASS, (c) patients in CLASS were treated with the study medications for more than 6 months, (d) the results being presented were based on 6 months data from a longer-term study and (e) that the results being presented were based on a comparison of Celebrex versus the pooled NSAID comparators.

52. These facts were disseminated to the market through securities analyst reports, company press releases, general news publications, and industry trade press.

53. Securities analyst reports reveal that market participants knew that ulcer complication were the primary endpoint of CLASS and that Celebrex failed to meet the primary endpoint. These facts were reported in securities analyst reports. For example, the authors of an April 17, 2000 JP Morgan report wrote that they had attended the CLASS study presentation at the American College of Physicians meeting on April 15, 2000. This report, cited by plaintiffs,

addresses the issue of CLASS study endpoints and the failure of the CLASS study to demonstrate statistical superiority on the primary endpoint:

Two endpoints used to measure GI safety were patients with (a) “ulcers and complications,” and (b) patients only with the more severe “complications.” “Complications” are an especially tough clinical hurdle to show superiority on because of trial design. This is because patients with an “ulcer” that do not have “complications” are removed from the trial and therefore unable to progress to “complications.” In addition, patients were allowed in this trial even if they were taking low dose aspirin (defined as up to 325-mg daily) for cardiovascular risk reduction. However, aspirin carries a GI risk of its own, in fact, though data were not presented we were told the risk of aspirin therapy alone appeared equivalent to the risk of NSAID therapy alone. The effect of aspirin on the trial may have been greater than anticipated. In addition, 10–12% of patients were initially expected to be on aspirin – the actual figure was 22%. Table 1 below shows the results on GI outcomes. For the endpoint “ulcers and complications” – Celebrex was statistically superior, both in the group including background aspirin therapy and when those patients are excluded. However, for the higher hurdle, “complications” only, Celebrex was only statistically superior when the aspirin takers were excluded, narrowly missing statistical significance ($p=0.09$ vs. the required $p=0.05$) among the study’s total population. Unfortunately, this was the predefined “primary endpoint” of the trial.

54. A similar report from Morgan Stanley Dean Witter dated April 18, 2000 reported that “Celebrex did not reach statistically significant superiority on the primary endpoint of ulcer complications.”¹⁷

55. In a *Pink Sheet* report released on April 24, 2000 titled “Searle To Discuss Adding Celebrex 13-Month Safety Data To Label With FDA” reported that, according to Dr. Silverstein, “[d]ata from the first six months of the trial were used for the head-to-head comparison of NSAIDs.”¹⁸ In this same report, Pharmacia acknowledged that the CLASS study missed the primary endpoint and it would have to persuade the FDA that a label modification was warranted.

“We really believe that the data are sufficiently compelling to warrant discussions with the FDA,” Searle VP-Arthritis Drug Clinical Development Steve Geis said

¹⁷ Morgan Stanley Dean Witter, April 18, 2000.

¹⁸ “Searle To Discuss Adding Celebrex 13-Month Safety Data To Label with FDA,” *The Pink Sheet*, April 24, 2000. The article quotes Steve Geis in the April 17 conference call as well.

during an April 17 conference call.

“It’s hard to speculate about what the outcome of that would be. We think the data are the type of data that we have heard that the medical community and the FDA have asked for and so we just have to bring them forward and begin to talk about what are the implications,” Geis said.¹⁹

56. Various sources, including Searle’s own press release, reported that patients in CLASS were treated with the study medications for more than 6 months and that the results presented in the April 17, 2000 press release and Dr. Silverstein’s presentation at ACP were based on six months of data from a longer-term study. The April 17, 2000 press release states that CLASS was “an approximately 13-month... trial.”²⁰

57. In terms of the pooling issue, the market learned that the incidence of GI complications in Celebrex patients was compared to the combined number of patients taking ibuprofen or diclofenac.²¹

58. My review of analyst reports published shortly after April 17, 2000 did not find any indication that the CLASS study results led to a revision in the market’s expectations regarding future sales of Celebrex. Morgan Stanley Dean Witter wrote,

... A revision of the label is likely to have a positive impact on reimbursement and sales of Celebrex. We are making no change to our forecasts, as we had anticipated the study to corroborate the strong safety profile of the product...²²

59. Exhibit 5 provides additional quotes from analyst reports and public press on the primary endpoint issue. Additionally, as shown in Exhibit 6, of the analyst reports that I reviewed, not a

¹⁹ “Searle To Discuss Adding Celebrex 13-Month Safety Data To Label with FDA,” The Pink Sheet, April 24, 2000.

²⁰ “The Celecoxib Long-term Arthritis Safety Study, an approximately 13-month, multi-center, randomized, double-blind outcomes trial of about 8,000 arthritis patients...” (Pharmacia press release, April 17, 2000).

²¹ “In a landmark study to assess the overall long-term safety of the COX-2 specific inhibitor Celebrex(R) (celecoxib capsules), arthritis patients taking four times the recommended osteoarthritis (OA) dose of the drug experienced fewer symptomatic gastrointestinal (GI) ulcers and ulcer complications than patients taking ibuprofen and diclofenac – a difference that was statistically significant based on a combined analysis of Celebrex versus these two traditional nonsteroidal anti-inflammatory drugs (NSAIDs).” (PR Newswire, April 17, 2000)

²² Morgan Stanley Dean Witter, April 18, 2000.

single analyst revised its earnings forecasts for Pharmacia after the April 15, 2000 announcement of CLASS study results. I found no other information released about Pharmacia on or around April 17, 2000 that could have an offsetting negative effect on Pharmacia's stock price.²³

60. Plaintiffs argue that the false and misleading portion of the April 17, 2000 announcement was that "[t]he press release... failed to reveal that the results being reported were a truncated six-month analysis, which was far more favorable to Celebrex than the data that defendants had already analyzed for the entire study period of approximately 13 months."²⁴

61. If Pharmacia's stock price did not change significantly on the April 15, 2000 announcement of CLASS study results because the market had expected these results (and thus the stock price already reflected this expectation) and the exclusion of the longer term results was material, one would expect to observe a statistically significant decline in Pharmacia's stock price when the market learned of the full CLASS study results on February 6, 2001. As discussed below, there was not a statistically significant decline in Pharmacia's stock price on this date. Based on the results of the event study analysis of Pharmacia's stock price on April 17, 2000 and the date of the allegedly corrective disclosure on February 6, 2001, I conclude that the alleged misrepresentations about the CLASS study made during April 15, 2000 and April 17, 2000 were not material. Therefore, there is no scientific basis to conclude that Pharmacia's stock price was inflated as a result of the announcements alleged by plaintiffs on April 17, 2000.

2. April 25, 2000

62. Plaintiffs allege that certain statements made during the April 25, 2000 conference call with analysts were materially false and misleading (Complaint, ¶39; Plaintiffs' second interrogatory response (no. 20)). Plaintiffs allege that the April 25, 2000 statements were misleading for the same reasons they allege that the April 15–17, 2000 statements were misleading (Complaint, ¶46). The event study analysis shows that Pharmacia's residual return on April 25, 2000 was *negative* 8.05% and statistically significant, which is inconsistent with Plaintiffs' claim that the alleged false statements made during the analyst conference call artificially inflated Pharmacia's stock price. Following Pharmacia's announcements on April 25, 2000, the commentary of analysts focused on Pharmacia's financial results. Among the

²³ Exhibit 7 shows all Pharmacia-specific news surrounding April 15–17, 2000 that I was able to identify.

²⁴ Plaintiffs' second interrogatory response (no. 20).

approximately 18 analyst reports published during April 25–26, 2000 available to me, none indicate that Pharmacia had provided any new information on that study. Based on this result and the event study analysis of the corrective disclosure days, it is my opinion that there is no scientific basis to conclude that the alleged misrepresentations made on April 25, 2000 materially inflated Pharmacia's stock price. Therefore, there is no scientific basis to conclude that Pharmacia's stock price was inflated as a result of the announcements alleged by plaintiffs on April 25, 2000.

3. May 22–23, 2000

63. On May 22, 2000, the preliminary CLASS study results were presented at the Digestive Disease Week conference. This was followed by a press release issued by Pharmacia on May 23, 2000. Plaintiffs refer to a May 23, 2000 report issued by Deutsche Banc Alex. Brown as “reiterating the contents of Pharmacia's press release.” (Complaint, ¶42) The authors of this report also stated that “We believe that the CLASS data could support a positive label change, tempering GI warnings dramatically, although we do not believe that the FDA would remove all GI warnings.” On May 25, 2000, Morgan Stanley Dean Witter wrote, “Though it is fruitless to speculate on whether FDA will remove NSAID warning altogether, addition of GI data is likely.”

64. Plaintiffs allege that the following statements were false and misleading because the press release “again discussed only the truncated six-month results, without revealing the existence of the less favorable post six-month data which had already been analyzed by the defendants.”²⁵ On the issue of the GI endpoint outcomes, Pharmacia repeated the results reported in the April 15, 2000 presentation and April 17, 2000 press release. The May 22, 2000 and May 23, 2000 announcements provide additional detail about other GI complications, required medical care, treatment withdrawal, blood loss, cardiovascular findings, and aspirin-related risks. In terms of the Complaint ¶46 issues, I did not find anything in the May 22, 2000 or May 23, 2000 announcements that had not already been disclosed in the April 15–17, 2000 announcements.

65. The event study analysis reveals that Pharmacia's residual return on May 22, 2000 was *negative* 2.71% and not statistically significant and Pharmacia's residual return on May 23, 2000 was 0.87% and not statistically significant. I identified no other information released about

²⁵ Plaintiffs' second interrogatory response (no. 20).

Pharmacia on May 22, 2000 and May 23, 2000 that conceivably could have had an adverse effect on Pharmacia's stock price.²⁶ Based on the results of the event study analysis of Pharmacia's stock price on May 22, 2000, May 23, 2000, and the alleged corrective disclosure dates, in my opinion, the alleged misrepresentations made on May 22, 2000 and May 23, 2000 were not material.²⁷ Therefore, there is no scientific basis to conclude that Pharmacia's stock price was inflated as a result of the announcements alleged by plaintiffs on May 22, 2000 or May 23, 2000.

4. September 13, 2000

66. On September 13, 2000, an article on the CLASS study appeared in the *Journal of the American Medical Association*. The Complaint (¶47) also mentions a PR Newswire report about the JAMA article issued at 8:15 a.m. Plaintiffs allege that the "article again falsely claimed a statistically significant result for complicated ulcers in patients not taking aspirin (see, e.g.,

²⁶ Other news releases included an announcement after close of trading on May 19, 2000 that Delta & Pine Land Co. was named as a co-defendant in a pre-existing lawsuit against Pharmacia's Monsanto unit; a May 20, 2000 Pharmacia announcement of the creation of a \$1 million fund to provide grants for cancer research; a May 22 announcement of positive results of a Phase II study involving the effectiveness of Aromasin (a drug not related to Celebrex) in treating breast cancer, positive results from a Phase III study involving Camptosar's effectiveness in treating small-cell lung cancer, and that it had filed its proxy statement; a May 23 Pharmacia announcement of promising preliminary results from a study of SU5416 in the treatment of colorectal cancer and that it had renewed its alliance with Paradigm Medical. Exhibit 8 shows all Pharmacia-specific news surrounding May 22–23, 2000 that I was able to identify.

²⁷ In the Complaint, Plaintiffs allege that additional materially false and misleading statements about the CLASS study were made during the period between the May 22, 2000 presentation of preliminary CLASS study results and the publication of the JAMA Article on September 13, 2000. (Note that plaintiffs do not allege in Plaintiffs' second interrogatory response (no. 20) that defendants issued any false or misleading statements in this interval.). First, plaintiffs allege that a JP Morgan analyst report issued on June 9, 2000 is evidence that "the market eagerly anticipated that revenue would increase dramatically with the removal of the GI warning label from Celebrex" (Complaint, ¶43). This report was a reissue of an identical report published on June 8. Pharmacia's residual return on June 8, 2000 is *negative* 0.23% and not statistically significant. I conclude that the information on the CLASS study in the June 9, 2000 JP Morgan report was already in the public domain and not material.

Second, the Complaint (¶44) includes Pharmacia's July 25, 2000 quarterly earnings announcement in the section titled "Materially False and Misleading Statements," but gives no explanation as to how or why the announcement was allegedly materially false and misleading (neither Complaint ¶46 nor ¶68 relates to the July 25 announcement). Pharmacia's residual return on July 25, 2000 is 6.82% and statistically significant. The information in the announcement on the CLASS study was already in the public domain and therefore cannot account for Pharmacia's significant residual return. Contemporaneous commentators attribute the price reaction on July 25 to Pharmacia's quarterly results. See, for example, Dow Jones News Service, July 25, 2000, 11:11 AM. I conclude that the significant residual return on July 25 is attributable to Pharmacia's quarterly results. It is not attributable to the information in the press release regarding the CLASS study, because that information was already in the public domain and not material.

Figure 2) and reported a main outcome measure that differed from the primary outcome measure of the study, not only in duration but also in the measures being assessed.”²⁸ In addition, plaintiffs point to an editorial by Dr. M. Michael Wolfe and Dr. David R. Lichtenstein (“Wolfe Editorial”) that also appeared in the September 13, 2000 issue of *JAMA*, and which discussed the *JAMA* article. (Plaintiffs’ Interrogatory Response at 12.)

67. Pharmacia’s residual return on September 13, 2000 was 0.84% and not statistically significant. The *JAMA* article, like the April 15–17, 2000 and May 22–23, 2000 announcements, pointed out that the CLASS study had failed to demonstrate a statistically significant improvement for Celebrex patients in terms of the primary endpoint (i.e., ulcer complications). Similarly, the Wolfe Editorial acknowledged that the CLASS study had failed to meet its primary endpoint. The *JAMA* Article restated that Celebrex patients had fewer incidences of the secondary endpoint, ulcer complications combined with symptomatic ulcers, compared to patients taking the comparator NSAIDs. The *JAMA* article stated that a six-month treatment period was used for the purposes of analysis. (The market had learned that the study ran for 13 months at least as early as the press release on April 17, 2000.) In terms of the GI complications at issue in the Complaint, the *JAMA* article repeated the key points of the April 15–17, 2000 announcements. I identified no other information about Pharmacia released on September 13, 2000 that realistically could have an adverse effect on Pharmacia’s stock price.²⁹ Based on the event study analysis of Pharmacia’s stock price on September 13, 2000 and the alleged corrective disclosure dates, in my opinion, there is no scientific basis to conclude that alleged misrepresentations on September 13, 2000 were material.³⁰ Therefore, there is no scientific

²⁸ Plaintiffs’ second interrogatory response (no. 20).

²⁹ Exhibit 9 shows all Pharmacia-specific news surrounding September 13, 2000 that I was able to identify.

³⁰ In the Complaint, Plaintiffs allege that additional materially false and misleading statements were made about the CLASS study during the period between the September 13, 2000 publication of the *JAMA* Article and the February 6, 2001 publication of the Briefing Document and FDA Review Documents. (Note that plaintiffs do not allege in Plaintiffs’ second interrogatory response (no. 20) that defendants issued any false or misleading statements in this interval.). First, plaintiffs allege that a report issued by ABN AMRO on September 18, 2000 “based on the September 13, 2000 press release” contained false and misleading information (Complaint, ¶49). Pharmacia’s residual return on September 18, 2000 is *negative* 1.84% and not statistically significant. Even assuming that statements made by ABN AMRO are attributable to Defendants, I conclude that the information on the CLASS study in the ABN AMRO report was already in the public domain and not material.

basis to conclude that Pharmacia's stock price was inflated as a result of the announcements alleged by plaintiffs on September 13, 2000.

5. November 23, 2000

68. The issue of the *New England Journal of Medicine* published on November 23, 2000 contained an article discussing Merck's VIGOR trial. This article also mentioned the CLASS study and stated that "data were reported from the first six months of a study period that extended for up to 13 months. Treatment with celecoxib was associated with a non-significant ($P=0.09$) trend toward a decrease in the incidence of the primary end point (complicated ulcers and erosions) and a significant decrease ($P=0.02$) in the incidence of the secondary end point (complicated and symptomatic ulcers)."³¹

69. Thus, even if the Court were to accept plaintiffs' allegations that it was not clear from Defendants' prior disclosures that CLASS lasted more than six months or that the analysis being presented in JAMA was based on six-month data, this article would be a curative disclosure. On November 24, 2000, the first trading day after the publication of this article, Pharmacia's residual return was negative 0.39% and not statistically significant. As a result, there is no scientific basis to conclude that, after November 23, 2000, the market was not aware that the CLASS study contained 13 months of data and that the JAMA article was based upon six months

Second, plaintiffs allege that the following statement by Pharmacia during its conference call with analysts during the morning of October 30, 2000 was materially false and misleading: "The Celebrex long-term outcome study published in September in JAMA, reinforces the superior safety and tolerability profile of Celebrex versus ibuprofen and diclofenac." Pharmacia's residual return on October 30, 2000 is *negative* 5.21% and significant. The negative residual return is inconsistent with plaintiffs' allegations that the alleged false statements about the CLASS study artificially inflated Pharmacia's stock price. Moreover, the statement was merely a repetition of the conclusions of the JAMA Article and contained no new information that was not previously in the public domain.

Third, plaintiffs allege that a Bear Stearns report dated October 31, 2000 was materially false and misleading and state that the report "repeated information provided ... in the previous day's conference call." (Complaint, ¶51) Pharmacia's residual return on October 31, 2000 is 5.14% and statistically significant. As plaintiffs admit, the Bear Stearns report contained no information about the CLASS study that was not previously known. Any effect of the October 31 Bear Stearns report on the stock price was therefore unrelated to its CLASS study statements. Even assuming that statements made by Bear Stearns are attributable to Defendants, I conclude that the information on the CLASS study in the Bear Stearns report dated October 31, 2000 was already in the public domain and not material.

³¹ NEJM, November 23, 2000 at 1526.

of data.³² Furthermore, my event study analysis indicates that there is no scientific evidence to support a conclusion that such information was material.

6. February 6, 2001

70. By the early trading hours on February 6, 2001, the FDA's Arthritis Advisory Committee posted its Medical Officer Review, the Medical Officer's Gastroenterology Review, and the Statistical Review on the FDA website.³³ A *Bloomberg* article published on February 6, 2001 at 10:05 a.m. contains quotes from the Medical Officer Review that was posted on the FDA website. The FDA documents discussed (a) the pooling issue and the two-step protocol, (b) the 6-month treatment period, and (c) the primary and secondary endpoint issues that the Complaint alleges were materially false and misleading (Complaint, ¶46). CLASS study results were displayed at six months (the assumption used in the JAMA Article) and using the entirety of the data.

71. In response to the written review, JP Morgan wrote the following on the morning of February 7, 2001:

Often the FDA review of data is gloomier than the Advisory Committee dialogue (to occur later today), so we will have to wait for the meeting today and tomorrow (for Vioxx) to get clear punchlines. We still view similar label revisions for both products, with both able to boost their NSAID superiority claim as the "most

³² In December, 2000, Leslie Tive, a Pfizer employee, published an article in *Rheumatology*, entitled "Celecoxib clinical profile." In this paper, Tive discussed the CLASS results. This article states that the CLASS trial lasted "1 yr" and that "[a]lthough the major results ... will be presented elsewhere (the report of the CLASS study has recently been published and should be referred to for more detailed results), the following provides a brief summary of the 6-month pooled data. At 6 months, the pooled data show that patients taking celecoxib had fewer POBs than those taking the other NSAIDs. When the incidence of PIBs was combined with the incidence of symptomatic ulcers, celecoxib demonstrated a significant reduction in these events compared with the other NSAIDs. Subgroup analysis of patients who were not taking aspirin ... demonstrated that, among these patients, those taking celecoxib had a significantly lower incidence of POBs, as well as POBs plus symptomatic ulcers." This article also contains a Table 1, which is entitled "Incidence of cardiovascular and cerebrovascular adverse events in the 13-month CLASS study," which shows comparisons of Celebrex to each of ibuprofen and diclofenac individually and there is no scientific basis to support plaintiffs' allegations that defendants failed to disclose Celebrex's lack of statistical significance versus diclofenac. However, I have not been able to determine the date of publication so I cannot use my event study to determine whether the publication of this article is associated with a statistically significant residual return.

³³ Plaintiffs say, "Defendants' scheme almost came unraveled when the FDA posted the CLASS study data on its website." (Complaint, ¶8) "When the CLASS study data was posted on the FDA's website, questions began to arise. It appeared there were differences between the article Pharmacia had published in JAMA and the CLASS study data." (Complaint, ¶64)

likely” outcome, but based on the FDA review of the Celebrex data, risks to that view have grown.³⁴

72. As discussed above, plaintiffs allege five material facts were not revealed as a result of defendants’ false and misleading statements:

1. That the entire study data was far less favorable to Celebrex than the publicly reported six-month data, with virtually every GI comparison worsening after six months;
2. That 85% of the complicated ulcers occurring after the first six months of the CLASS trial were suffered by patients being treated with Celebrex;
3. That the statistically significant benefit for Celebrex users not taking aspirin that defendants reported based upon six months of data for complicated ulcers did not hold for the entire study period;
4. That Celebrex failed to establish any statistically significant difference with diclofenac (one of the two comparator NSAIDs) on any of the eight GI endpoints considered; and
5. That diclofenac was actually numerically superior to Celebrex on one of the two co-primary endpoints of the study.

73. Each of these facts was ascertainable from the information posted on the FDA website on the morning of February 6, 2001. As a result, all of the allegedly material false and misleading information that plaintiffs contend should have been revealed on April 17, 2000 was known by the market no later than February 6, 2001.

74. Pharmacia’s residual return on February 6, 2001 was *negative* 0.20% and not statistically significant. I found no other information released about Pharmacia on February 6, 2001 that conceivably could have affected Pharmacia’s stock price.³⁵ Plaintiffs do not allege that any allegedly corrective information regarding the results of the CLASS study was revealed to the market at any time prior to February 6, 2001. Furthermore, the allegedly omitted information described in plaintiffs’ interrogatory response was fully disclosed on February 6, 2001. Based on

³⁴ JP Morgan, February 7, 2001.

³⁵ Exhibit 10 shows all Pharmacia-specific news surrounding February 6, 2001 that I was able to identify.

the event study analysis of Pharmacia's stock price on February 6, 2001 and the alleged corrective disclosure dates, in my opinion, there is no scientific basis to conclude that the full revelation of the CLASS study data, including the information contained in the Medical Officer Review, the Medical Officer's Gastroenterology Review, and the Statistical Review posted on the FDA website on February 6, 2001 materially inflated Pharmacia's stock price. Moreover, the lack of a statistically significant decline in Pharmacia's stock price on February 6, 2001 indicates that plaintiffs cannot establish loss causation relating to the revelation of the CLASS study results and the Company's prior presentations of those results. Therefore, there is no scientific basis to conclude that inflation was removed from Pharmacia's stock price or that the price was inflated as a result of the news revealed to the market on February 6, 2001 and there is no scientific basis to conclude that plaintiffs incurred an economic loss due to the alleged misstatements.

7. February 7, 2001

75. In the Complaint, Plaintiffs do not allege that any corrective information related to the allegedly false and misleading statements attributable to the defendants regarding the CLASS study was revealed on February 7, 2001. In fact, the Complaint does not refer to the date of February 7, 2001 or the Advisory Committee hearing, except as mentioned within a *Washington Post* article published on August 5, 2001. The Complaint claims that the "Defendants' scheme almost came unraveled *when the FDA posted the CLASS study data on its website*" (Complaint ¶8, emphasis added), which occurred on February 6, 2001. Moreover, the Complaint (¶64, emphasis added) alleges, "*When the CLASS study data was posted on the FDA's website*, questions began to arise. It appeared there were differences between the article Pharmacia had published in *JAMA* and the CLASS study data." While the Complaint points to an alleged corrective disclosure that occurred on February 6, 2001, plaintiffs have since alleged (Plaintiffs' second interrogatory response (no. 22)) that the class incurred losses "on or about" February 7, 2001 and apparently on February 7, 2001 and February 8, 2001.

76. On February 7, 2001, the FDA's Arthritis Advisory Committee held a public meeting on the CLASS study. Representatives of Pharmacia, FDA personnel and others discussed the CLASS study data and conclusions that could be drawn from the data. The hearing was conducted from 8:00 a.m. to 3:25 p.m. Dr. James Witter, Medical Officer, who spoke first at the hearing, provided a history of the COX-2 category. A representative of Searle (the company

Pharmacia bought to acquire Celebrex) spoke next, finishing at approximately 10:15 a.m. (estimated based on the schedule and pages in the transcript). Near the end of the hearing, the Advisory Panel indicated that it would not recommend a change in the Celebrex label.³⁶ This news entered the public press at 2:25 p.m. on February 7, 2001.

77. After the hearing on February 7, 2001, Bear Stearns commented on the recommendation:

Assuming that both Celebrex and Vioxx's GI warning remains unchanged, there is little commercial implication, in our view. We believe that physician's [sic] widely view Celebrex as safer than traditional NSAIDs. For this reason, at this time we are maintaining our sales estimates of \$2.5 billion and \$3.2 billion in 2000 and 2001, respectively, and believe that the COX-2 inhibitor category will grow to more than \$10 billion by 2005. That being said, clearly, the outcome of tomorrow's Advisory Panel meeting could have a dramatic effect on the landscape of COX-2 inhibitor market, and therefore our Celebrex estimates.

78. The FDA Advisory Committee hearing was based on information regarding the full data of the CLASS study that had been revealed to the market during trading hours on February 6, 2001. Before the start of trading on February 8, 2001, CSFB wrote,

The FDA Arthritis Advisory Committee recommended no change in Celebrex's label during discussions Wednesday. This labeling posture resulted from statistical complications within the CLASS clinical trial, including Celebrex's failure to achieve a statistically significant improvement in its complicated ulcer primary endpoint and FDA requests for further study on the effects of COX-2 in combination with aspirin. We view this FDA decision as mildly disappointing, but manageable from a marketing standpoint.

Based on FDA concerns over possible COX-2 cardiovascular class effects, we also do not expect that the agency will grant Merck's Vioxx improved labeling during similarly scheduled meetings on Thursday.

While labeling improvement would have accelerated the current NSAID to COX-2 market conversion, we believe this FDA decision will not meaningfully impact

³⁶ The FDA would soon decide to allow a Celebrex label modification. On April 12, 2001, Pharmacia announced that the FDA had sent it an "approvable" letter allowing for the inclusion of certain CLASS study results on the Celebrex label should specific conditions be met. On June 7, 2002, the FDA approved the addition of CLASS study results to the Celebrex label.

our current growth forecasts for the Celebrex product line. Pharmacia remains a buy rated focus stock with a 12 month price target of \$72.³⁷

79. Pharmacia's residual return on February 7, 2001 was *negative* 2.90% and not statistically significant. Pharmacia's two-day residual return on February 6–7, 2001 was *negative* 3.10% and not statistically significant.

80. Importantly, the news on February 7, 2001 included the FDA Advisory Committee's reaction to the full CLASS study data. This reaction took the form of statements that the Committee would recommend to the FDA that Pharmacia not be allowed to modify the Celebrex label with the CLASS study data. As mentioned previously, the FDA eventually allowed Pharmacia to modify the Celebrex label with the CLASS study data. It is inappropriate to use the entirety of the residual decline in Pharmacia's stock price on February 7, 2001 as a measure of alleged damages for several reasons. First, the residual change in Pharmacia's stock price on February 7, 2001 is not statistically significant. Second, any use of the February 7, 2001 residual stock price decline to measure alleged stock price inflation due to the alleged misstatements during the class period rests on a false assumption that the news on February 7, 2001 could have been disclosed earlier (e.g., at the start of the class period). Even if during the class period Pharmacia had described the CLASS study results as Plaintiffs alleged it should have, Pharmacia could not have predicted the specific reaction by the Committee in the February 7, 2001 hearing. Nor could the market have predicted the specific reaction under those circumstances. In sum, it is inappropriate to treat the statistically insignificant residual decline in Pharmacia's stock price on February 7, 2001 as an appropriate measure of alleged loss in this case.

81. As mentioned above, I understand that plaintiffs contend that "On or about February 7, 2001, the FDA, through the posting of certain voluminous briefing documents on its website and a discussion at a FDA advisory committee meeting, disclosed for the first time the facts referenced in response to Interrogatory No. 20. Following this disclosure, Pharmacia's share price dropped \$4.60 or approximately 9%." (Response to Interrogatory No. 22) It is unclear how Plaintiffs arrived at a stock price decline of \$4.60. This is the only alleged corrective disclosure for which plaintiffs allegedly experienced losses relating to the allegations in this case. I am unable to match plaintiffs' numbers to the stock prices "on or around" February 7, 2001.

³⁷ CSFB, February 8, 2001.

The closest I have come is from the closing price of \$57.65 on February 6, 2001 to the closing price of \$53.00 on February 8, 2001, Pharmacia declined by \$4.65 or 8.70%. Plaintiffs are almost certainly including the return on February 8, 2001 in the statement cited. As discussed below, no allegedly corrective disclosure regarding plaintiffs' allegations was made on February 8, 2001.

82. Based on the event study analysis of Pharmacia's stock price on February 6–7, 2001 and the alleged corrective disclosure dates, it is my opinion that there is no scientific basis to conclude that the information contained in the Medical Officer Review, the Medical Officer's Gastroenterology Review, and the Statistical Review posted on the FDA website on February 6, 2001, the vetting in the hearing of opinions on the CLASS study, and the Advisory Panel's recommendation (later not accepted by the FDA) to the CLASS study materially inflated Pharmacia's stock price. Moreover, the lack of a statistically significant decline in Pharmacia's stock price on February 6–7, 2001 indicates that plaintiffs cannot establish loss causation relating to the revelation of the CLASS study results and the Company's prior presentations of those results.

8. February 8, 2001

83. On February 8, 2001, the Advisory Panel held a hearing on a safety study put forth by Merck for its COX-2 inhibitor drug Vioxx, a direct competitor drug to Celebrex. Although the Complaint does not mention the Advisory Panel's Vioxx hearing on February 8, 2001, as discussed above, plaintiffs appear to be including Pharmacia's stock return on February 8, 2001 in their statements and therefore must be alleging that this date is relevant to the issues in this case.

84. Pharmacia's residual return on February 8, 2001 was *negative* 5.59%, which is statistically significant. The major news about the February 8, 2001 Vioxx hearing was that the FDA Advisory Panel was going to allow Merck to add safety data from its study to the Vioxx label. When this information was released at approximately 3:00 p.m., Pharmacia's stock price declined by approximately \$2.50, or 4.45%. Exhibit 11 shows the intraday trading price and volume of Pharmacia stock on February 8, 2001. The \$2.50 decline that began immediately after 3:00 p.m. represented approximately 94% of the gross price decline on February 8, 2001. In other words, 94% of the observed price decline occurred in the last hour of trading, immediately

after the FDA Advisory Panel announced its recommendation regarding the Vioxx label. This is consistent with an efficient market reacting to information and impounding it into the stock price almost immediately. The Advisory Panel's reaction to the Merck study is distinct from the allegations in this case. The Advisory Panel's reaction to the Merck study did not reveal any new information to the market regarding the allegedly false and misleading statements and omissions alleged by the plaintiffs regarding the results of the CLASS study. Additionally, there is no way that defendants could have been aware of, much less revealed, the Advisory Panel's findings regarding the VIGOR study prior to February 8, 2001. I could find no other information released about Pharmacia on February 8, 2001 that related to the issues in this case. Hence, there is no scientific basis for the Plaintiffs to claim that Pharmacia's statistically significant negative residual return on February 8, 2001 relates to the issues in this case.

85. My review of analyst reports before and after the FDA advisory hearing also indicates that analysts remained uncertain about the ultimate impact of the hearing on Celebrex. In a February 8, 2001 report, Salomon Smith Barney, which actually increased its forecasted Celebrex sales, wrote:

"FDA did not recommend a GI label change for PHA's Celebrex on Feb 7, but Pharmacia believes that it can potentially include GI safety data vs. ibuprofen in the Celebrex label, based on comments by the FDA committee chairman. FDA has a June 2001 deadline to act on both label changes. Its [sic] not over yet."³⁸

86. Also in a February 8, 2001 report, CIBC World Markets, which maintained its forecasted Celebrex sales, wrote:

With changes to Vioxx's label, Celebrex could be disadvantaged. We stress "could," as comments today suggest that changes are still possible. The FDA has consistently stressed the equivalency of Celebrex and Vioxx vs. NSAIDS as well as vs. each other. With uncertainty, though, the PHA shares could be weak.³⁹

87. Although plaintiffs do not allege that any corrective information regarding the allegedly false and misleading statements regarding the results of the CLASS study was revealed to the market on either February 7, 2001 or February 8, 2001, it is noteworthy that none of the

³⁸ Salomon Smith Barney, February 8, 2001.

³⁹ CIBC World Markets, February 8, 2001.

investment analysts revised their recent projections for Pharmacia earnings downward by more than two cents immediately following the FDA hearings.⁴⁰ This indicates that investment analysts did not view the information revealed during the FDA hearings to have a major impact on their preexisting projections for Pharmacia's sales and profitability. See Exhibit 6, which compares all analyst projections for Pharmacia earnings that were made immediately after the FDA hearings with prior projections.

H. Analysis of Complaint Days Following the Alleged Corrective Disclosures

88. I understand that the Third Circuit has ruled that the market was fully aware of the entirety of the CLASS study results after February 6, 2001 but had no reason to suspect that Pharmacia potentially had committed fraud in its presentation of the CLASS data. It is further my understanding that the Third Circuit has ruled that the market became fully aware of the possibility of fraud after the publication of the *Post* article. In this section, I examine the Complaint Days after February 8, 2001 in which Pharmacia allegedly made false and misleading statements about the CLASS study leading up to the *Post* article. I also include a discussion of April 12, 2001, a date not alleged by the plaintiffs to either be a curative disclosure or a date in which the market was given false and misleading information, to provide additional context regarding the outcome of the FDA hearings.

1. February 12, 2001

89. Plaintiffs allege that the following statements in Pharmacia's conference call (following its quarterly earnings announcement) of February 12, 2001 were materially false and misleading: "Celebrex was proven safer than older NSAIDs in its NDA trials through endoscopy measures and now again in long-term clinical use.... And if there are any further questions about the data, I actually might refer you to the publication of the long-term outcomes data in the September issue of JAMA..." (Complaint, ¶52) However, plaintiffs do not allege in Plaintiffs' second interrogatory response (no. 20) that defendants issued any false or misleading statements on February 12.

⁴⁰ I am aware of only one analyst, Enskilda Securities, that revised its EPS projections downward by almost 9%, bringing its EPS estimate for Pharmacia into line with the other investment analysts. However, the most recent EPS projection prior to February 9, 2001 from Enskilda Securities was issued on July 25, 2000.

90. Pharmacia's residual return on February 12, 2001 is *negative* 0.65% and not statistically significant. Based on the event study analysis of Pharmacia's stock price on February 12, 2001 and the alleged corrective disclosure dates, in my opinion, there is no scientific basis to conclude that the allegedly misleading statements about the CLASS study made during the February 12, 2001 conference call materially inflated Pharmacia's stock price. Therefore, there is no scientific basis to conclude that Pharmacia's stock price was inflated as a result of the announcements alleged by plaintiffs on February 12, 2001.

2. April 12, 2001

91. Pharmacia announced that it had received an approvable letter from the FDA for revised labeling of Celebrex during trading hours on April 12, 2001. The FDA issued a "written statement that indicates the FDA's willingness to approve an application, should specific additional information or material be submitted or specific conditions be met."⁴¹ It is my understanding that an approvable letter does not constitute an approval of the application. A public press article published on Dow Jones stated that "[t]he positive letter from the FDA puts Pharmacia a step closer to making changes on its Celebrex label... Merck & Co., which produces the competing drug Vioxx, announced it received a similar letter Tuesday. In both letters the FDA said it will likely approve the label change if certain criteria are met."⁴² I understand that plaintiffs do not address the fact that the FDA indicated a willingness to approve a label change for Celebrex in either the Complaint or interrogatory responses. Pharmacia's residual return on April 12, 2001 is 0.37% and not statistically significant.

3. April 25, 2001

92. Plaintiffs allege that the following statement, made by Carrie Cox on April 25, 2001 during a conference call following the quarterly earnings announcement, was materially false and misleading: "We're confident that this [CLASS] study and all previous studies comparing Celebrex to traditional NSAIDs in approximately 20,000 subjects have demonstrated that Celebrex is effective, well tolerated, and offers an excellent GI safety profile." (Complaint, ¶57) However, plaintiffs do not allege in Plaintiffs' second interrogatory response (no. 20) that defendants issued any false or misleading statements on April 25.

⁴¹ PR Newswire, 3:31 pm.

⁴² Dow Jones, 3:32 pm.

93. Pharmacia's negative residual return on April 25, 2001 is *negative* 0.05% and not statistically significant. Based on this result and the event study analysis of Pharmacia's stock price on the alleged corrective disclosure dates, in my opinion, there is no scientific basis to conclude that information in the allegedly misleading statements of April 25, 2001 materially inflated Pharmacia's stock price. Therefore, there is no scientific basis to conclude that Pharmacia's stock price was inflated as a result of the announcements alleged by plaintiffs on April 25, 2001.

4. May 30, 2001

94. Plaintiffs allege that an analyst report issued by Prudential Securities on May 30, 2001 "which repeated information provided by defendants Hassan and Cox" contained false and misleading information (Complaint, ¶58). However, plaintiffs do not allege in Plaintiffs' second interrogatory response (no. 20) that defendants issued any false or misleading statements on May 30.

95. Pharmacia's residual return is on May 30, 2001 1.02% and not statistically significant. Based on this result and the event study analysis of Pharmacia's stock price on the alleged corrective disclosure dates, it is my opinion that the May 30, 2001 statements alleged by plaintiffs to be false and misleading did not materially inflate Pharmacia's stock price.

5. July 25, 2001

96. Plaintiffs allege that the following statements made by Carrie Cox during a conference held by Pharmacia on the morning of July 25, 2001 (following an earnings announcement) were false and misleading: "The studies have shown that Celebrex is equal in efficacy to traditional NSAIDs, but superior in its ability to free arthritis patients from gastrointestinal side effects." (Complaint, ¶60) However, plaintiffs do not allege in Plaintiffs' second interrogatory response (no. 20) that defendants issued any false or misleading statements on July 25.

97. Pharmacia's residual return is *negative* 0.30% and not statistically significant. Based on this result and the event study analysis of Pharmacia's stock price on the alleged corrective disclosure dates, in my opinion, the July 25, 2001 statements alleged by plaintiffs to be false and misleading did not materially inflate Pharmacia's stock price.

6. August 5, 2001

98. On August 5, 2001, the *Washington Post* published an article concerning the *JAMA* article, issues with the article's submission to *JAMA*, and the FDA Arthritis Advisory Committee's conclusions. According to the *Washington Post* article, M. Michael Wolfe, one of the coauthors of an editorial that accompanied the September 13, 2000 *JAMA* article, learned "in February" that the CLASS study "had lasted a year, not six months." The article said Wolfe learned this when he "was shown the complete data from the [CLASS] study as a member of the Food and Drug Administration's arthritis advisory committee." The information in the article related to the alleged shortcomings in the CLASS study was already in the public domain. The Complaint describes the article as an "expose" on the *JAMA* article, suggesting one should have expected a decline in the Pharmacia stock price if the *JAMA* article had in fact misled and continued to mislead the market as the Complaint alleges.

99. Pharmacia's residual return on Monday, August 6, 2001 was 0.96% and not statistically significant. I found no other information about Pharmacia released during August 5–6, 2001 that conceivably could have had a positive effect on Pharmacia's stock price.⁴³ Hence, based on this analysis, I conclude that the information in the *Washington Post* article on August 5, 2001 was not material. This evidence indicates that there is no scientific basis to conclude that there is loss causation or damages relating to Pharmacia's alleged commission of fraud relating to its prior portrayal of the CLASS study results.

100. My review of analyst reports published shortly after August 5, 2001 did not find any indication that the *Washington Post's* discussion of the CLASS study results led to a revision in the market's expectations regarding future sales of Celebrex. In fact, I did not find any discussion of the *Washington Post* article of any kind in the analyst reports. Therefore, there is no basis to conclude that inflation was removed from Pharmacia's stock price as a result of the news revealed to the market on August 5, 2001.

IX. Insider Trading Allegations

101. I also have been asked to consider whether Ms. Cox and Dr. Geis sold Pharmacia stock at prices that were artificially inflated because of the alleged misrepresentations during the class period. As discussed above, my analysis indicates that there is no basis to conclude that

⁴³ Exhibit 12 shows all Pharmacia-specific news surrounding August 5, 2001 that I was able to identify.

Pharmacia's stock price traded at an inflated price at any time during the class period. Therefore, in my opinion, there is no scientific basis to conclude that Ms. Cox and Dr. Geis sold Pharmacia stock at prices that were artificially inflated because of the alleged misrepresentations during the class period.

Executed this 7th of June, 2011



Appendix A

1. Event study analysis is a statistical method commonly used in financial economics to estimate the relation between releases of information and changes in a company's security prices.¹ Event study analysis takes into account the effect of market and/or industry factors on a company's stock returns on the relevant event dates. This is typically done by using regression analysis to estimate the historical relation between a company's stock returns and the corresponding returns on the market index and/or industry index. Parameters from the regression model are then used along with the actual performance of the market index and/or industry index on the day in question to estimate an expected return. The expected return is then subtracted from the actual return to estimate a residual return (sometimes referred to as an "abnormal return" or "market-adjusted return") on the relevant event date.

2. When performing event studies, it is conventional to test the "null hypothesis" that the residual return is zero against either the alternative hypothesis that the residual return is different from zero, or the alternative hypothesis that the residual has a particular sign (*i.e.*, it is positive, or it is negative).² If the null hypothesis cannot be rejected at conventional levels of significance, then the residual returns are not considered to be statistically significant, *i.e.*, they are not considered to be significantly different from zero. Under these circumstances, one cannot conclude that the observed residual on the relevant date is attributable to the firm-specific information released on that date.

3. In event studies, the statistical significance of the residual returns typically is assessed by calculating a standardized measure of the size of the residual return known as a "t-statistic." A t-statistic with an absolute value of 1.65 or greater denotes statistical significance at the 5 percent level of significance in a "one-tailed" test of statistical significance.³ In a one-tailed test, the null

¹. See, e.g., MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, No. 1, March 1997, pp. 13-39.

². See, e.g., Campbell, John Y., Andrew W. Lo, and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997, at 160-66; MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, March 1997, pp. 13-39; Schwert, G. William, "Using Financial Data to Measure Effects of Regulation," *Journal of Law and Economics*, Vol. 24, No. 1, 1981, pp. 121-57; Fischel, Daniel R., "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," *The Business Lawyer*, No. 38, No. 1, 1982, pp. 1-20, at 19.

³. See, e.g., Beaver, R., W. Mendenhall, and J. Reinmuth, *Statistics for Management and Economics*, Duxbury Press, 1993, at 346-47.

Appendix A

hypothesis is that the residual return is zero, and the alternative hypothesis is that the residual return has a particular sign (*e.g.*, it is negative).

4. Estimating a market model for Pharmacia requires the choice of an estimation period and a market index and/or an industry index. For the estimation period, I used the period from April 17, 2000 through August 5, 2001, 2010, (*i.e.*, the period from the first relevant announcement through the last relevant announcement – see discussion in the text). To avoid confounding the estimation with price movements related to the alleged wrongdoing, I included indicator variables for the date of each Complaint Day, as well as the day before and the day after each Complaint Day.

5. In this case, I used the NYSE Index (“NYSE index”) and a Competitor Index of peer firms to control for movements in the market and peer company indexes during the control period. The NYSE index is a comprehensive and widely known index of large companies traded on the New York Stock Exchange. The Competitor Index is an equal-weighted index comprised of Bristol-Myers Squibb Co., Eli Lilly & Co., Schering-Plough Corp., AstraZeneca plc, GlaxoSmithKline plc, Abbott Laboratories, Novartis AG, American Home Products Corp. and Johnson & Johnson. I did not include Pfizer and Merck in the Competitor Index because I thought that including those firms in the index might bias the event study away from finding Celebrex-related news to be associated with statistically significant residual stock returns. Pfizer co-marketed Celebrex with Pharmacia, so good Celebrex-related news would be expected to move both stock prices upward. Merck marketed Vioxx, a Cox-2 Inhibitor and competitor to Celebrex. Good news about Cox-2 Inhibitors would move Pharmacia and Merck’s prices in the same direction; good news for Vioxx relative to Celebrex would be expected to move Pharmacia and Merck’s prices in the opposite direction.⁴

⁴ Although I think the exclusion of Pfizer and Merck from the Competitor Index is an appropriate and conservative choice, I checked whether including them changes the significance of any Complaint Days. Making this adjustment to the model does not change the significance of any of the Complaint Dates discussed in this report.

June 2011

Exhibit 1
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Curriculum Vitae

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Education

Ph.D., Washington University, 1981 (Economics)
M.A., Miami University, 1976 (Economics).
B.A., Waynesburg College, 1975 (Economics).

Employment

Samuel A. McCullough Professor of Finance, March 1999-present; Professor of Business Administration, September 1991-March 1999; Katz Graduate School of Business, University of Pittsburgh.

Professor of Law, School of Law, University of Pittsburgh, September 1997-present.

Director, Center for Research on Contracts and the Structure of Enterprise, University of Pittsburgh, 1991-2001.

Chief Economist, U.S. Securities and Exchange Commission, June 1987-July 1991.

Adjunct Professor of Law, Georgetown University, 1990-1991.

Assistant Professor of Business and Public Policy, School of Business Administration, Washington University, 1981-1987.

Research Associate, Center for the Study of American Business, Washington University, 1986-1987.

Visiting Assistant Professor of Economics, University of California, Los Angeles, 1986.

Deputy Chief Economist, U.S. Securities and Exchange Commission, 1984-1985.

Instructor of Economics, Miami University, 1976-1977.

Courses Taught

Corporate Finance (MBA)
Applied Corporate Finance (MBA)
Valuation (MBA)
Creating Value through Restructuring (MBA)
Organization of Securities Markets (Undergraduate)
Business and Public Policy (Undergraduate, MBA, Executive)
Corporate Governance (Doctoral)
Finance for Lawyers (Law)

Teaching Awards

MBA Teacher of the Year (Pittsburgh), nine times.
MBA Teacher of the Year (Washington U.), 1987.
Undergraduate Teacher of the Year (Washington U.), 1981.

Publications

Books

Modernizing U.S. securities regulation: economic and legal perspectives, ed. with Robert W. Kamphuis, Jr., Homewood, Ill.: Business-One Irwin, 1993.

Published Papers

“Sarbanes-Oxley and corporate risk-taking,” with Leonce Barger and Chad Zutter, *Journal of Accounting and Economics*, February 2010, 34-52.

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“The causes and consequences of accounting fraud,” with Mason Gerety, *Managerial and Decision Economics* (November-December 1997), 587-599.

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Expert Witness Testimony During Last Four Years

Securities and Exchange Commission v. Lisa Berry, deposition testimony, San Francisco, Ca., May 2011.

Joel Krieger, et al., v. Wesco Financial Corporation, et al, deposition testimony, New York, N.Y., April 2011.

Silverman v. Motorola, deposition testimony, Washington, D.C., January 2011.

NACCO Industries Inc., et al. v. Applica, et al., deposition testimony, New York, N.Y., December 2010.

In Re Le-Nature's Inc. Commercial Litigation, arbitration testimony, Pittsburgh, Pa., December 2010.

Securities and Exchange Commission v. Raj Sabhlok and Michael Pattison, trial testimony, San Francisco, Ca., September 2010.

Securities and Exchange Commission v. Angelo Mozilo, David Sambol and Eric Sieracki, deposition testimony, Chicago, Ill., July 2010.

In Re Le-Nature's Inc. Commercial Litigation, deposition testimony, New York, N.Y., June 2010.

In Re John Q. Hammons Shareholder Litigation, trial testimony, Georgetown, Del., June 2010.

In Re John Q. Hammons Shareholder Litigation, deposition testimony, New York, N.Y., April 2010.

Securities and Exchange Commission v. Raj Sabhlok and Michael Pattison, deposition testimony, San Francisco, Ca., December 2009.

LDK Solar Securities Litigation, deposition testimony, San Francisco, Ca., December 2009.

Makor Issues & Rights Ltd. v. Tellabs, Incorporated, deposition testimony, Chicago, Ill., October 2009.

Rogers et al. v. Baxter International, et al., deposition testimony, Chicago, Ill., September 2009.

Mainstay High Yield Corporate Bond Fund v. Heartland Partners et al., deposition testimony, New York, N.Y., September 2009.

In re Metropolitan Securities Litigation, deposition testimony, New York, N.Y., September 2009.

27001 Partnership, et al. v. BT Securities Corporation, et al., deposition testimony, New York, N.Y., August 2009.

Securities and Exchange Commission v. Biovail Corporation et al., deposition testimony, New York, N.Y., July 2009.

Silverman v. Motorola, et al., deposition testimony, Washington, D.C., June 2009.

Brieger, et al. v. Tellabs, Inc. et al., trial testimony, Chicago, Ill., May 2009.

DVI Securities Litigation, deposition testimony, Philadelphia, Pa., February 2009.

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Xcelera.com Securities Litigation, Daubert hearing to exclude the testimony of Scott Hakala, Boston, Mass., April 2008.

Liberty Media Corporation, et al. v. Vivendi Universal S.A., et al., deposition testimony, New York, N.Y., April 2008.

HealthSouth Corporation Stockholder Litigation, deposition testimony, New York, N.Y., April 2008.

Apollo Securities Litigation, trial testimony, Phoenix, Ariz., January 2008.

Schering-Plough Securities Litigation, deposition testimony, Roseland, N.J., September 2007.

Xcelera.com Securities Litigation, deposition testimony, Boston, Mass., August 2007.

Omnicom Securities Litigation, deposition testimony, New York, N.Y., May 2007.

Janet Baker, et al. v. Dexia, S.A. and Dexia Bank Belgium, deposition testimony, Pittsburgh, Pa., April 2007.

Ohio Public Employees Retirement System, et al. v. Richard D. Parsons, et al., deposition testimony, New York, N.Y., March 2007.

Cardinal Health Securities Litigation, mediation testimony, Dallas, Tx., March 2007.

Apollo Securities Litigation, deposition testimony, Pittsburgh, Pa., February 2007.

Other Consulting

Independent Distribution Consultant, Pilgrim Baxter & Associates (now Liberty Ridge Capital), 2004-2010.

Independent Distribution Consultant, Federated Investors, 2006-present.

Independent Distribution Consultant, Hartford Financial, 2007-2009.

Independent Distribution Consultant, Wachovia Corp., 2007-present.

Independent Distribution Consultant, GAMCO, 2008-present.

Board and Committee Memberships

NASD ATC Advisory Committee, 2006-2007.

Shadow Financial Regulatory Committee, 2003-2007.
Allegheny Institute, 2005-present.
Aristech Receivables, 1998-2001.
Weirton Receivables, 1993-2001.
Borden Receivables, 1994-1996.
Carbide/Graphite Group Receivables, 1993-1996.
Economic Advisory Board, The Nasdaq Stock Market, 1996-1998.
Academic Advisory Council, Turnaround Management Association, 2000–present.
Advisory Board, Mobot Inc., 2000.

Journal Refereeing

American Economic Review
Economic Inquiry
Economic Journal
Financial Management
Harvard Business School Press
Irwin Publishing
Journal of Business
Journal of Economics and Management Strategy
Journal of Finance
Journal of Financial Economics
Journal of Financial and Quantitative Analysis
Journal of Law and Economics
Journal of Law, Economics, and Organization
Journal of Managerial Accounting Research
Journal of Political Economy
Management and Decision Economics
National Science Foundation
Quarterly Journal of Economics
Rand Journal of Economics
University of Chicago Press

University Service

Dean Search Committee for Katz School of Business, 2005-2006.
Promotion and Tenure Committee, Katz Graduate School of Business, 2004-2006., 2008-present.
Distinguished Faculty Committee, 2003-2005.
Executive Committee, Katz Graduate School of Business, 1994-1995 (co-chair); 1998-2001 (co-chair, 2000); 2008-present.
Appeals Panel for Grievance over Denial of Tenure (chair), 1999.
Steering Committee for University's Reaccreditation with Middle States Association, 1999.

Promotion and Tenure Committee, Katz Graduate School of Business, 1999-2001.
Dean Search Committee for Katz Graduate School of Business, 1995.
Internal Review Committee for Economics Department (chair), 1994.
Faculty Appointment Committee, Katz Graduate School of Business, 1993-1994.
MBA Curriculum Committee, Katz Graduate School of Business, 1993.
Doctoral Policy Committee, Katz Graduate School of Business, 1991-1993; 2003-2005.

Other Professional Service

Founding Editor, *Journal of Corporate Finance*, 1992-2001.
Associate Editor, Investment Management and Financial Innovations, 2004-2006.
Associate Editor, *Journal of Financial Research*, 1999-2005.
Associate Editor, *The Financial Review*, 1998-2003.
Associate Editor, *Asia-Pacific Journal of Accounting & Economics*, 2000-2003.
Associate Editor, *International Journal of the Economics of Business Economics*, 1994-present.
Associate Editor, *Pacific-Basin Finance Journal*, 1992-1996.
Editorial Board, *Investment Management and Financial Innovations*, 2004-2006.
Advisory Board, *Financial Economics Network*, 1994-present.
Advisory Board, *Journal of Financial Abstracts*, 1994-present.
Advisory Board, *Corporate, Securities, and Finance Law Abstracts*, 1996-present.
Advisory Board, *The Financier*, 1994-2003.
Advisory Board, *The Arbitrageur*, 1998-2003.
Program Committee, 1992, 1993 Pacific Basin Conferences.
Program Committee, 1992 Western Finance Association Meetings.
Program Committee, 1992, 1996, 2007 Financial Management Association Meetings.

Seminar Presentations

Arizona State University, Boston College, California Polytechnic University, Columbia University, U.S. Department of Justice, Depaul University, Drexel University, Duquesne University, Federal Reserve Bank of New York, U.S. Federal Trade Commission, George Mason University, Georgetown University, Georgia Institute of Technology, Harvard University, Hofstra University, Indiana University, Massachusetts Institute of Technology, Michigan State University, Northeastern University, Northwestern University, Oberlin College, Ohio State University, Ohio University, Pennsylvania State University, Purdue University, U.S. Securities and Exchange Commission, Southern Methodist University, Texas A&M University, Tulane University, University of California (Los Angeles), University of California (Santa Barbara), University of Chicago, University of Delaware, University of Florida, University of Illinois, University of Kansas, University of Maryland, University of Michigan, University of Missouri, University of Missouri (St. Louis), University of North Carolina, University of Notre Dame, University of Oregon, University of Pennsylvania, University of Rhode Island, University of Rochester, University of South Carolina, University of Southern California, University of Texas,

University of Texas (Dallas), University of Utah, University of Virginia, Washington University
(St. Louis).

Exhibit 2

Documents Considered

Legal Pleadings

- Consolidated Complaint for Violation of the Federal Securities Laws, dated October 27, 2003
- Defendants' Brief in Support of Their Motion to Dismiss the Consolidated Amended Class Action Complaint with Prejudice Pursuant to Fed. R. Civ. P. 9(b), Fed. R. Civ. P. 12(b)(6), and the Private Securities Litigation Reform Act of 1995, dated December 22, 2003
- Declaration of William A. Dreier in Support of Defendants' Motion to Dismiss the Consolidated Complaint with Prejudice (with Exhibits 1-23), dated December 22, 2003
- Plaintiffs' Responses to Defendants Pharmacia Corporation, Fred Hassan, G. Steven Geis, Carrie Cox and Pfizer, Inc.'s First Set of Requests for Admission to Plaintiffs, dated March 31, 2011
- Plaintiffs' Response to Defendants Pharmacia Corporation, Fred Hassan, G. Steven Geis, Carrie Cox, and Pfizer, Inc.'s Second Set of Interrogatories with ROG Responses 20, 21 and 23, dated March 21, 2011

Expert Reports

- Expert Report of Kenneth M. Lehn Concerning Class Certification, with Exhibits, dated August 31, 2006
- Expert Report of Dr. Anthony Fiorino, with Appendices, dated June 7, 2011
- Declaration of Scott D. Hakala, with Exhibits, dated October 18, 2006

Public Press

- Articles regarding Pharmacia Corp. from 4/1/00 – 8/31/01 from Bloomberg and Factiva, including sources such as: PR Newswire, Business Wire, AP Newswires, Dow Jones News Service, The Wall Street Journal, Reuters News, and Knight Ridder Tribune Business News. A listing can be provided on request.
- Analyst reports regarding Pharmacia Corp. and Pfizer Corp. (see attached list)
- Conference call transcripts from Pharmacia Corp. for 1Q 2000, 2Q 2000, 3Q 2000, 4Q 2000, 1Q 2001, and 2Q 2001 earnings announcements
- FDA warning letters, label changes, and presentations from FDA website
- Reports published on The Pink Sheet, Pharmaceutical Approvals Monthly and Health News Daily

Academic Articles

- Beaver, R., W. Mendenhall, and J. Reinmuth, *Statistics for Management and Economics*, Duxbury Press, 1993
- Binder, John J., "On the Use of the Multivariate Regression Model in Event Studies," *Journal of Accounting Research*, Vol. 23, No. 1, Spring 1985, pp. 370–383
- Binder, John J., "The Event Study Methodology Since 1969," *Review of Quantitative Finance and Accounting*, September 1998
- Brealy, Richard A., and Stewart C. Myers, *Principles of Corporate Finance*, 6th Ed., 2000

- Brealy, Richard A., and Stewart C. Meyers, *Principles of Corporate Finance*, 7th Ed., 2003
- Brown, Stephen J., and Jerold B. Warner, “Using daily stock returns: The case of event studies,” *Journal of Financial Economics*, Volume 14, 1985, pp. 3–31
- Campbell, John Y., Andrew W. Lo, and A. Craig MacKinlay’s *The Econometrics of Financial Markets* in “Event Study Analysis,” Princeton University Press, 1997
- Fischel, Daniel R., “Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities,” *The Business Lawyer*, No. 38, No. 1, 1982, pp. 1-20
- Gilson, Ronald J., Charles J. Meyers, Marc & Eva Stern, and Bernard S. Black, “Event Studies: Measuring the Impact of Information,” *The Law and Finance of Corporate Acquisitions*, 1995
- Hooke, Jeffrey C., *Security Analysis on Wall Street: A Comprehensive Guide to Today’s Valuation Methods*, 1998
- MacKinlay, A. Craig , “Event Studies in Economics and Finance,” *Journal of Economic Literature*, Vol. 35, No. 1, March 1997, pp. 13-39
- Patell, James M. and Mark A. Wolfson, 1984, “The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements,” *Journal of Financial Economics*, Volume 13, pp. 223–252
- Schwert, G. William, “Using Financial Data to Measure Effects of Regulation,” *Journal of Law and Economics*, Vol. 24, No. 1, 1981, pp. 121-57

Data Sources

- Common stock price, volume, and return data for Pharmacia Corp., Bristol-Myers Squibb Co., Eli Lilly & Co., Schering-Plough Corp., AstraZeneca plc, Glaxosmithkline plc, Abbott Laboratories, Novartis AG, American Home Products Corp. and Johnson & Johnson from the University of Chicago’s Center for Research in Security Prices
- Return data for NYSE Composite Index from Bloomberg
- Price and volume data for Pharmacia Corp. bonds from Bloomberg and Datastream

SEC Filings

- Form 10Ks and 10Qs for Pharmacia Corp. (2000 10-K, 2001 10-K, 2002 1Q 10-Q, 2002 2Q 10-Q)
- Form 4’s (Statement of Changes in Beneficial Ownership) Carrie Smith Cox of Pharmacia Corp.
- Steven Geis’ Financial Records WELLS 00001-352

All other sources cited in report and exhibits.

Exhibit 2A

Analyst Reports Considered

Date	Title	Source
1/6/99	Merck & Co. - Pharmaceutical Industry Analysis the Coming of the COX-2S: Benchmarking Analogies are Bullish	JP Morgan Securities
1/1/00	Monsanto Co. - Mergent FIS - History & Debt	The Investext Group
1/1/00	Monsanto Co. - Mergent FIS - Company Report	The Investext Group
1/4/00	Pharmacia & Upjohn Inc. - Mergent FIS - Company Report	The Investext Group
1/4/00	Monsanto Co.: Recommend Monsanto Shareholders Vote No for Pharmacia & Upjohn Merger	DLJ Securities
1/5/00	Pharmacia and Upjohn - Building a Better Company Through Monsanto Merger - PNU Target Price \$59-60	JP Morgan
1/5/00	Monsanto Company - Recommend Monsanto Shareholders Vote Against Pharmacia & Upjohn Merger	Donaldson, Lufkin & Jenrette
1/13/00	PNU to Launch Novo Nordisk's Women's Health Drugs in US - Part 1	Salomon Smith Barney
1/13/00	PNU to Launch Novo Nordisk's Women's Health Drugs in US - Part 2	Salomon Smith Barney
1/13/00	Research Note - Monsanto: GD Searle December Prescription Data	Paine Webber
1/13/00	Monsanto: GD Searle December Prescription Data	Paine Webber
1/15/00	Stoneville Pedigreed Seed Co/Investor Group [Brief] - Thomson Financial Securities Data - M&A	The Investext Group
1/18/00	Pfizer - Increasing Estimates on More Modest Spending	JP Morgan
1/21/00	MTC: Monsanto Pre-Announces Strong Fourth Quarter and Year	Salomon Smith Barney
1/26/00	Update - Pharmaceuticals - Pharmacia & Upjohn	Credit Lyonnais Securities Europe
1/26/00	Mise a jour - Pharmacia - Pharmacia & Upjohn	Credit Lyonnais Securities Europe
1/31/00	Monsanto - Summary of Comments by Phil Needleman	Morgan Stanley Dean Witter
1/31/00	Note - MTC: Proxy and Protocol	Salomon Smith Barney
2/1/00	Company Result Update - Monsanto Chemicals Ltd (MCL) - Results (Q3FY200)	Indiainfoline.com
2/2/00	PNU: Analyst Merger Refreshes the Story	Credit Suisse First Boston
2/2/00	Pharmacia & Upjohn, Inc.: Merger with MTC Viewed Favorably	DLJ Securities
2/2/00	Pharmacia & Upjohn - Roadshow Offers Clarity on Merger's Financial Targets	Morgan Stanley Dean Witter
2/2/00	PNU: Upgrading Rating to Outperform from Neutral - Part 1	Salomon Smith Barney
2/2/00	PNU: Upgrading Rating to Outperform from Neutral - Part 2	Salomon Smith Barney
2/2/00	Monsanto - A Star is Being Born: We Give "Another" Thumbs Up to the Potential Merger of Monsanto with Pharmacia & Upjohn	Sutro & Co.
2/2/00	MTC: Rating Reduced to Pharmacia & Upjohn Outperform to Correspond with PNU Upgrade	Salomon Smith Barney
2/2/00	MTC: Pharmacia Mgmt Highlights 20% Earnings Growth for New Company	Salomon Smith Barney
2/3/00	Pharmacia & Upjohn - Analyst Meeting on Merger Refreshes the Story, Provided Little Additional News	Credit Suisse First Boston
2/4/00	PNU: 4Q99 Preview; Report Date Feb 10	Salomon Smith Barney
2/5/00	Pharmacia & Upjohn Inc. - Mergent FIS - Company Report	The Investext Group
2/7/00	Monsanto Co.: Benefits to Accrue from Monsanto/Pharmacia & Upjohn Merger	DLJ Securities
2/7/00	Research Note - Monsanto Company - Monsanto: Disposal Program Winding Down	PaineWebber
2/7/00	Monsanto: Disposal Program Winding Down	PaineWebber
2/8/00	Research Note - Monsanto Company - Monsanto: AG Deals Could Spur EPS Changes	PaineWebber
2/8/00	Monsanto: AG Deals Could Spur EPS Changes (Part 1 of 2)	PaineWebber
2/10/00	Pharmacia & Upjohn - 4th Quarter EPS In-Line, but Earnings Composition Better (Especially Gross Margins)	JP Morgan
2/10/00	FY (99) Update: Pharmacia & Upjohn - Waiting for Completion of the Merger!	Nordic Equities
2/10/00	Pharmacia & Upjohn Inc. - 4Q99 EPS in Line-RX Delivers Again	CIBC World Markets
2/10/00	PNU: 4Q Earnings Miss Expectations - PT 1-2	Credit Suisse First Boston
2/10/00	PNU: 4Q Earnings Miss Expectations - PT 2-2	Credit Suisse First Boston
2/10/00	PNU: 4Q99 EPS at Expectations	Salomon Smith Barney
2/10/00	MTC: 4Q99 Results on Target, Good Growth in 2000	Salomon Smith Barney
2/11/00	Pharmacia & Upjohn - PNU Reports 1999	Morgan Stanley Dean Witter
2/11/00	Pharmacia & Upjohn: Solid Momentum into 2000	Paine Webber
2/11/00	Pharmacia & Upjohn: Solid Momentum into 2000	Paine Webber
2/11/00	PNU Drug Update - Part 1	Salomon Smith Barney
2/11/00	PNU Drug Update - Part 2	Salomon Smith Barney
2/11/00	PNU: 4Q99 EPS Details - Part 1	Salomon Smith Barney
2/11/00	PNU: 4Q99 EPS Details - Part 2	Salomon Smith Barney
2/11/00	Monsanto Company: Fourth Quarter Earnings on Target	DLJ Securities
2/11/00	Monsanto Company - Fourth Quarter Earnings on Target	Donaldson, Lufkin & Jenrette
2/11/00	Monsanto 4Q Conference Call Highlights	Morgan Stanley Dean Witter
2/11/00	Monsanto: No Upside Glyphosate Stocking, Searle in Line	Paine Webber
2/11/00	Monsanto Company - Monsanto: No Upside Glyphosate Stocking, Searle in Line	Paine Webber
2/11/00	MTC's Searle: Recapturing Momentum in Cox-2 Inhibitor Market - Part 3	Salomon Smith Barney
2/14/00	Pharmacia & Upjohn, Inc.: 4Q EPS in Line with Expectations	DLJ Securities

Date	Title	Source
2/15/00	Pharmacia & Upjohn, Inc. - In-Line 4Q99--Maintain Market Perform Rating and EPS Estimates	Deutsche Bank
2/15/00	Earnings Report Update - Monsanto Company	PNC Advisors
2/16/00	Pharmacia & Upjohn (PNU): Reports 4th Quarter Earnings	Morgan Stanley Dean Witter
2/17/00	Pharmacia & Upjohn: January Prescription Data	Paine Webber
2/17/00	Pharmacia & Upjohn: January Prescription Data	Paine Webber
2/22/00	Pharmacia & Upjohn - Tomorrow's an FDA Decision Day for PNU's Vestra	SG Cowen
2/23/00	MTC: Biogums Unit Sold; Debt Likely to be Reduced	Salomon Smith Barney
3/1/00	Pharmacia & Upjohn	SG Cowen
3/3/00	MTC: Merger Likely to be Completed by Month End	Salomon Smith Barney
3/7/00	Bulletin - Pharmacia & Upjohn - Pharmacia: Prepared for Outperformance	Merrill Lynch
3/9/00	Pharmacia & Upjohn	SG Cowen
3/13/00	Pharmacia & Upjohn, Inc./ Allergon Division - Corporate Technology Information Services, Inc.	Investext
3/13/00	Pharmacia Hepar Inc. - Corporate Technology Information Services, Inc.	Investext
3/13/00	Pharmacia & Upjohn, Inc. - Corporate Technology Information Services, Inc.	Investext
3/13/00	Pharmacia & Upjohn, Inc./Diagnostics Division - Corporate Technology Information Services, Inc.	Investext
3/13/00	Sugen, Inc. - Corporate Technology Information Services, Inc.	Investext
3/13/00	Pharmacia & Upjohn, Inc./Oncology Business Unit - Corporate Technology Information Services, Inc.	Investext
3/13/00	Pharmacia & Upjohn, Inc./ Animal Health Division - Corporate Technology Information Services, Inc.	Investext
3/13/00	Pharmacia & Upjohn, Inc./Consumer Healthcare Division - Corporate Technology Information Services, Inc.	Investext
3/13/00	Monsanto Co. - Corporate Technology Information Services, Inc.	Investext
3/13/00	Monsanto Co./ AG Sector - Corporate Technology Information Services, Inc.	Investext
3/16/00	Pharmacia & Upjohn: February Prescription Data	Paine Webber
3/16/00	Pharmacia & Upjohn: February Prescription Data	Paine Webber
3/16/00	Monsanto Company - Monsanto: A Bittersweet Harvest	Paine Webber
3/16/00	GD Searle February Prescription Data	Paine Webber
3/16/00	Monsanto: GD Searle February Prescription Data	Paine Webber
3/17/00	Monsanto Company - Monsanto: Comprehensive 90-Page Merger Analysis Report Available Today	Paine Webber
3/21/00	Monsanto - Global Agricultural Chemicals Consolidation Trend Continues	JP Morgan
3/22/00	Pharmacia Corp. - Creation of New "Porsche Pharma" Offers Potential to be Better Than Biotech	Arnhold and S. Bleichroeder, Inc.
3/22/00	COX-2 Inhibitor Market - Boosting Forecast to \$13 Billion by 2004	Arnhold and S. Bleichroeder, Inc.
3/22/00	Morning Meeting Research Notes - COX-2 Inhibitor Market - Boosting Forecast to \$13 Billion by 2004	JP Morgan
3/22/00	MTC: Shareholder Vote for Tomorrow on PNU/MTC Merger	Salomon Smith Barney
3/23/00	Pharmacia & Upjohn - FDA Advisory Committee to Review Zyvox on March 24 - We Expect A Favorable Outcome	JP Morgan
3/23/00	PNU: Shareholders Approve Merger, Preview of Zyvox Review - Part 1	Salomon Smith Barney
3/23/00	PNU: Shareholders Approve Merger, Preview of Zyvox Review - Part 2	Salomon Smith Barney
3/27/00	Pharmacia & Upjohn - FDA Advisory Committee Recommends Zyvox's Approval	JP Morgan
3/27/00	Pharmacia & Upjohn - Zyvox FDA Advisory Panel Bodes well for Approval	ABN-AMRO
3/27/00	Pharmacia & Upjohn - FDA Advisory Committee Recommends Zyvox	Credit Suisse First Boston
3/27/00	Pharmacia & Upjohn - Zyvox Clears the FDA Advisory Committee	SG Cowen
3/30/00	Equity Alert - Monsanto Company	PNC Advisors
4/1/00	Pharmacia Corp. - Ett Tillfalligt Hack I Tillvaxtkurvan?	Aragon
4/3/00	Pharmacia - PNU and Monsanto to Complete Merger - To Trade as Pharmacia (PHA) from Today	JP Morgan
4/3/00	Pharmacia - Pharmacia & Upjohn and Monsanto Complete Merger - Now Trade as Pharmacia (PHA)	JP Morgan
4/3/00	Pharmacia Corp. Starts Trading Today - Great Prospects on Tap	SG Cowen
4/4/00	Pharmacia Corp. - Initiating Coverage with an Outperform Rating	Morgan Stanley Dean Witter
4/4/00	Equity Alert - Pharmacia Corporation	PNC Advisors
4/6/00	Monsanto - MTC: Dropping Coverage	Salomon Smith Barney
4/10/00	Pharmacia Corp. - Favorite Stock in the Group	Bear, Stearns & Co. Inc.
4/11/00	Pharmacia & Upjohn Inc. - History & Debt - Financial Information Services	The Investext Group
4/12/00	Pharmacia Corporation - Rochester COX-2 Patent a Potential Long Term Court Battle	ABN-AMRO
4/12/00	Pharmacia Corporation - PHA: COX-2 Patent Litigation with University of Rochester	Salomon Smith Barney
4/13/00	Pharmacia - U. of Rochester Gets COX-2 Patent: Looks Weak on Initial Review, Worst Case Manageable	JP Morgan
4/13/00	Pharmacia Corp. - Pharmacia Corp.: March Prescription Data	Paine Webber
4/13/00	Pharmacia Corp. - Financial Information Services - Mergent FIS - Company Report	The Investext Group
4/13/00	Pharmacia Corp.: March Prescription Data (Part 1 of 2)	PaineWebber
4/13/00	Pharmacia Corp.: March Prescription Data (Part 2 of 2)	PaineWebber
4/13/00	Pharmacia Corp.: March Prescription Data	PaineWebber

Date	Title	Source
4/14/00	Pharmacia Corp. - Cox-2 Developments	Arnhold and S. Bleichroeder, Inc.
4/17/00	Pharmacia Corporation - Summary of "Class" Study Reinforces Celebrex Safety Profile	Arnhold and S. Bleichroeder, Inc.
4/17/00	Celebrex Class Trial Confirms G.I. Safety (with a Slight Wrinkle)-No Cardiovascular Risk	JP Morgan
4/17/00	Pharmacia and Pfizer: Class Trial Results Revealed Early and Met Our Expectations	SG-Cowen
4/18/00	Pfizer - PFE Reports Excellent 1Q00 Results with EPS of \$0.28/+33%; Raising Estimates	A.G. Edwards & Sons, Inc.
4/18/00	Pfizer - PFE Reports Excellent 1Q00 Results with EPS of \$0.28/+33%; Raising Estimates	A.G. Edwards & Sons, Inc.
4/18/00	Pfizer - Pre-Merger Cost Savings Offset Top Line Weakness in Strong Q1 EPS	ABN-AMRO
4/18/00	Domestic Pharmaceuticals - PFE 1Q/00 -- Expect %0.25 on 16% Revenue Increase -- Possible Down Quarter for Zithromax Should Not Concern Investors	Bernstein Research Call
4/18/00	Summary: Pfizer Drugs	Citigroup
4/18/00	PFE: Alliance Revenues & Operating Leverage Drive Upside Earnings Surprise FBC	CS First Boston
4/18/00	Pharmacia Corp. - Positive Results of Celebrex Class Trial Released	Morgan Stanley Dean Witter
4/18/00	Pharmacia Corp - History & Debt - Financial Information Services	The Investext Group
4/19/00	Pfizer Inc. - PFE: Partners' Drug Drive First-Quarter Results	Brown Brothers Harriman & Co.
4/19/00	Summary: Pfizer Drugs	Citigroup
4/19/00	Pfizer Inc. (NYSE:PFE) - Upgrading PFE to Strong Buy-Average with 12-Mo. Price Target of \$50	Dain Rauscher Wessels
4/19/00	Pharmacia Corporation - Report due on April 25	Danske Securities
4/19/00	Pfizer Inc. [PFE] - Raising EPS Estimates and Upgrading Investment Rating to Strong Buy from Buy	Deutsche Bank Securities Inc.
4/19/00	Pfizer Reports First Quarter EPS \$0.02 Ahead of Our Estimate and \$0.03 Above Consensus. Maintaining Revenue and EPS Estimates for 2000; Reiterating Our 1-1, Outperformer Rating	Gruntal & Co. L.L.C.
4/19/00	Pfizer - Sales a bit Light, but EPS Growth in Cruise Control Owing to Cost Leverage - Raising Estimates	JP Morgan Americas Archive
4/19/00	Pfizer Inc. (NYSE: PFE) - Cost Savings Boost PFE's 1Q00 EPS	Morgan Stanley Dean Witter
4/19/00	Pfizer - PFE Posts Solid Q1 Results; Raised Sights for Growth of Combination	SG Cowen
4/19/00	Pfizer, Inc. (PFE/NYSE) - Pfizer Beats Q1-00 Expectations Driven by Strong Top-Line, Reiterate #1-Strong Buy	Tucker Anthony Cleary Gull
4/19/00	Pharmacia Corporation - Q1 00 Preview	Danske Securities
4/20/00	Healthcare Symposium 2000 - New York	JP Morgan
4/25/00	Pharmacia Corporation - PHA Reports 1Q00 EPS \$0.33/+27%, in Line with Expectations (PHA: \$54 5/8)	A.G. Edwards & Sons, Inc.
4/25/00	Pharmacia Corporation - PHA Reports 1Q00 EPS \$0.33/+27%, in Line with Expectations (PHA: \$53)	A.G. Edwards & Sons, Inc.
4/25/00	Pharmacia Corporation - Celebrex Poised to Bounce; Ag Weakness Less Important	ABN-AMRO
4/25/00	Pharmacia Corp. (PHA) - Solid In-Line 1Q00, Sales and EPS Expected to Accelerate Going Forward	Bear, Stearns & Co., Inc.
4/25/00	Pharmacia (PHA.ST) - Ready for a Pick-Up Later This Year!	Carnegie
4/25/00	Pharmaceuticals - Pharmacia Corporation - 1Q00 EPS; Concerns Over Top Line	CIBC World Markets
4/25/00	Pharmacia Corporation - Q1 00 Report - Celebrex Concern Continues	Danske Securities
4/25/00	Pharmacia - No Major Surprises	Handelsbanken Markets
4/25/00	Pfizer Inc. - Earnings Report Update	PNC Advisors
4/25/00	PHA: 1Q2000 EPS at Expectations, but Sales Growth Light	Salomon Smith Barney
4/25/00	Pharmacia Corporation - Q1 AG. Shortfall Reduces Visibility a Bit - But Pharma on Track	SG Cowen
4/25/00	Pharmacia & Upjohn - Q1(00) Previews	Carnegie
4/26/00	Pharmacia Corporation - First-Quarter EPS on Target	Arnhold and S. Bleichroeder, Inc.
4/26/00	AM Call: PHA: Earnings Meet Guidance; Establishing Forecasts, Target (PT 1) FBC	Credit Suisse First Boston
4/26/00	Pharmacia Corporation: Newco's First Quarter on Target	DLJ Securities
4/26/00	Pharmacia - 1Q EPS Composition Less Impressive, but Growth Outlook Appears Robust	JP Morgan
4/26/00	Comment - Pharmacia Corp. - Pharmacia Corp 1Q: Two Income Statements Pulled Together	Merrill Lynch
4/26/00	Pharmacia Corp.: AG Off to a Slow Start, but 2000 EPS in Tack P1	Morgan Stanley Dean Witter
4/26/00	Pharmacia Corp.: AG Off to a Slow Start, but 2000 EPS in Tack/P2	Morgan Stanley Dean Witter
4/26/00	Pharmacia Corp. Ag Off to a Slow Start, but 2000 EPS in Tack	Morgan Stanley Dean Witter
4/26/00	Pharmacia Corp. - Pharmacia Corp.: 1Q00 EPS In Line; Sales Disappointing with Just Modest Growth	Paine Webber
4/26/00	Pharmacia Corp. - PHA: Earnings Meet Guidance; Establishing Forecasts, Target (PT 1)	Credit Suisse First Boston
4/26/00	Pharmacia Corp. - PHA: Earnings Meet Guidance; Establishing Forecasts, Target (PT 2)	Credit Suisse First Boston
4/26/00	Pharmacia Corporation - NewCo's First Quarter Out of the Box Disappointing--Strong EPS Growth in Line, but Revenues Weak--Maintain MARKET PERFORM Rating and Lowering EPS Slightly	Deutsche Banc Alex. Brown
4/26/00	Pharmacia Corporation - AG. Franchise in a Q1 Drought: Pharma will Pick Up the Slack	SG Cowen
4/27/00	Pfizer Inc. (NYSE: PFE) - Cost Savings Boost PFE's 1Q00 EPS	Morgan Stanley Dean Witter
4/27/00	Pharmacia	Swedbank Markets
4/27/00	Pharmacia - From Discount to Premium in a Short Time	Swedbank Markets
4/28/00	Pharmacia Corp. - Earnings Meet Guidance; Established Forecasts, Targets	Credit Suisse First Boston
5/2/00	Pfizer Inc. - Best-in-Class and Poised to Outperform	Deutsche Banc Alex. Brown

Date	Title	Source
5/4/00	Bulletin - Pharmacia Corp. - Class Gets an A for Strong Results	Merrill Lynch
5/8/00	Comment - Pharmacia Corp. - Class Gets an A for Strong Results	Merrill Lynch
5/11/00	Pharmacia & Upjohn Inc. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
5/12/00	Monsanto - Could Have a New Business Outlook as Part of Pharmacia; Still the World's Biggest Herbicide Seller	Brown Brothers Harriman & Co
5/15/00	Monsanto Chemicals of India Ltd	India Infoline
5/16/00	Pfizer Inc. and Warner-Lambert Co. An Earnings Juggernaut	JP Morgan
5/16/00	Pfizer Inc. (Buy) Warner-Lambert Co. (Buy) Company Update - An Earnings Juggernaut	JP Morgan
5/16/00	Pharmacia & Upjohn Inc. - History & Debt - Financial Information Services	Thomson Financial
5/18/00	Pharmacia Corp. - Pharmacia Corp.: April Prescription Data	Paine Webber
5/18/00	Pharmacia Corp.: April Prescription Data (Part 1 of 2)	Paine Webber
5/18/00	Pharmacia Corp.: April Prescription Data (Part 2 of 2)	Paine Webber
5/23/00	Pfizer Inc. (PFE), Pharmacia Corporation (PHA), Merck & Co. Inc. (MRK) - Positive Class Results Could Support Celebrex Label Change--Waiting for Vioxx Vigor Results on Wed. May 24	Deutsche Banc Alex. Brown
5/23/00	Pfizer Inc. [PFE], Pharmacia Corporation [PHA], Merck & Co. [MRK] - Positive Class Results Could Support Celebrex Label Change--Waiting for Vioxx	Deutsche Banc Securities Inc.
5/23/00	Pharmacia Corporation - Positive CLASS Results Could Support Celebrex Label Change -- Waiting for Vioxx VIGOR Results on Wed. May 24	Deutsche Banc Alex. Brown
5/24/00	AM Call: PHA: Burgeoning Oncology Franchise Adds Product Diversity	Credit Suisse First Boston
5/24/00	Pfizer Inc.: Purchase Recommended of World's Fastest Growing Pharma (Part 1 of 2)	DLJ Securities
5/24/00	Pfizer Inc.: Purchase Recommended of World's Fastest Growing Pharma (Part 2 of 2)	DLJ Securities
5/24/00	Merck & Co., Pharmacia Corp. - Merck Presents Vigor Trail at DDW-More Numbers, Same Punchlines	JP Morgan
5/24/00	Pharmacia Corp. - PHA: Burgeoning Oncology Franchise Adds Product Diversity	Credit Suisse First Boston
5/25/00	Pharmacia Corp. - Burgeoning Oncology Franchise Adds Product Diversity	Credit Suisse First Boston
5/25/00	Pharmacia Corp. - Positive Clinical Outcomes Studies Presented at DDW	Morgan Stanley Dean Witter
5/30/00	Pharmacia Corp. - PHA Power Brunch with Dr. Goran Ando	Morgan Stanley Dean Witter
5/31/00	Myriad Genetics - Myriad Delivers Two Novel Protein Targets to Pharmacia Reiterate Buy Rating and 18-24 Month Price Target of \$100	Oscar Gruss
6/2/00	Global Viewpoint - COX-2 Inhibitor Update - Vioxx Cardiovascular Safety Issues Unresolved; GI Safety Trials Presented at Annual Digestive Disease Week Meeting	Arnhold and S. Bleichroeder, Inc.
6/5/00	Pharmacia Corp. - Pharmacia: Upgrading to Attractive from Neutral	Paine Webber
6/5/00	Pharmacia: Upgrading to Attractive from Neutral (Part 1 of 2)	PaineWebber
6/5/00	Pharmacia: Upgrading to Attractive from Neutral (Part 2 of 2)	PaineWebber
6/7/00	Pharmacia Corp. - Expanded Competition within Arthritis Treatment	Enskilda Securities
6/8/00	Company Update - Pharmacia Corp. - A Low-Risk Ride on the COX-2 Wave	JP Morgan
6/8/00	Pharmacia Corporation - Earnings Estimate Revision	PNC Advisors
6/8/00	Pharmacia Corp. - A Low-Risk on the COX-2 Wave	JP Morgan Securities Inc.
6/9/00	Pharmacia - A Low-Risk Ride on the COX-2 Wave	JP Morgan
6/12/00	Pharmacia Corporation: 2Q Pharma Sales to Show Accelerated Growth (1/2)	DLJ Securities
6/12/00	Pharmacia Corporation: 2Q Pharma Sales to Show Accelerated Growth (2/2)	DLJ Securities
6/15/00	Pharmacia Corp. - Pharmacia Corp.: May Prescription Data	Paine Webber
6/15/00	Pharmacia Corp.: May Prescription Data (Part 1 of 2)	Paine Webber
6/15/00	Pharmacia Corp.: May Prescription Data (Part 2 of 2)	Paine Webber
6/15/00	Pharmacia Corp. - Financial Information Services - Mergent Files - Company Report	Thomson Financial
6/17/00	NutraSweet Co Inc (Monsanto Co) / JW Childs Equity Partn[Brief] - Thomson Financial Securities Data - M&A	Thomson Financial
6/20/00	Pfizer Inc. - PFE/WLA Merger Closed	CIBC World Markets
6/21/00	Pharmacia - Watch for Any Signs of Merger Effects	Handelsbanken Markets
6/21/00	Pharmacia Corp. (PHA)	Paine Webber
6/22/00	Pharmacia & Upjohn Inc. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
6/23/00	Pharmacia Corp. - Pharmacia: Weakness Presents Buying Opportunity	Paine Webber
6/24/00	Sementes Agroceres (Monsanto) / Empresas la Modema SA de CV ... - Thomson Financial Securities Data- M&A	Thomson Financial
6/26/00	Pharmacia Corporation - PHA: Initiating Coverage with a Rating of Buy	Banc of America Securities
6/26/00	Pharmacia Corp. - Downward Adjustments to Ag; Modest Impact Overall	Morgan Stanley Dean Witter
6/27/00	Orchid Biosciences - Enters into Licensing Deal with Amersham Pharmacia for SNP-IT Primer Extension Technology. Reiterate Buy Rating.	Robertson Stephens
6/28/00	Pfizer Inc. (NYSE: PFE) - Update from Meeting with CEO and President	Morgan Stanley Dean Witter
7/6/00	Pharmacia Corp. - Analyst's Best Call - Prospects for Growth	Paine Webber
7/13/00	Pharmacia Corp. - Pharmacia Corp.: June Prescription Data	Paine Webber
7/13/00	Pharmacia Corp.: June Prescription Data - Part 1 of 2	Paine Webber
7/13/00	Pharmacia Corp.: June Prescription Data - Part 2 of 2	Paine Webber
7/18/00	Pharmaceuticals - Pharmacia Corporation - A Blue Chip in the Making	ING Barings LLC
7/21/00	Pfizer Inc. Zeldox - Pfizer's Next Blockbuster; Price Target Raised	Arnhold and S. Bleichroeder, Inc.
7/21/00	Initiating Coverage - Pharmacia Corporation - Initiating with a Strong Buy; A Blue Chip in the Making	ING Barings LLC
7/21/00	Pharmacia Corp - Financial Information Services - Mergent FIS - Company Report	Thomson Financial

Date	Title	Source
7/24/00	Indiainfoline Company Result Update - Monsanto Chemicals of India Ltd - Results (Q1 FY2001)	Indiainfoline
7/25/00	PHA Reports 2Q00 EPS \$0.47/+18%, In Line with Expectations - Pharmacia Corporation	A.G. Edwards & Sons, Inc.
7/25/00	Pfizer - PFE Reports 2Q00 Results Above Expectations with EPS of \$0.23/+21%	A.G. Edwards & Sons, Inc.
7/25/00	Pfizer Inc. - Attractive PFE Reports Solid 2Q EPS, Beats Consensus by \$0.01, 25% EPS Growth Forecast for Next Three Years	Bear Stearns & Co. Inc.
7/25/00	Pharmacia Corp. (PHA) - Acceleration in Pharma, and Turnaround in Agricultural Segment is Encouraging	Bear Stearns & Co., Inc.
7/25/00	Pharmacia (PHA.ST) - Impressive Top-Line Growth!	Carnegie
7/25/00	Pharmaceuticals - Pharmacia Corporation - Growth Story on Track-Reiterate Buy	CIBC World Markets
7/25/00	Pharmacia Corp. - In-Line Quarter, AgChem Strength Surprises Market	Credit Suisse First Boston
7/25/00	Pfizer Inc. [PFE] - PFE 2Q00 EPS	Deutsche Banc Alex. Brown
7/25/00	Pfizer Inc.: World's Largest & Fastest Growing Pharma Co. Beats Ests.	DLJ Securities
7/25/00	Pharmacia Corp. - Solid, but Underlying Pharma EBIT is Unimpressive	Enskilda Securities
7/25/00	Pharmacia - Strong Report-In Line with Expectations	Handelsbanken Investment Banking
7/25/00	Pfizer Inc. (NYSE: PFE) - Sales Light, but Underlying Demand Remains Strong	Morgan Stanley Dean Witter
7/25/00	PFE: 2Q EPS Beat Consensus by a Penny	Salomon Smith Barney
7/25/00	Pfizer (PFE) - PFE: 2Q EPS Beat Consensus by a Penny	Salomon Smith Barney
7/25/00	Pharmacia Corporation - AG. Products a Big Surprise (Positive) in Q2-EPS on Target	SG Cowen
7/25/00	Pharmacia Corp - History & Debt - Financial Information Services- Mergent FIS - History & Debt	Thomson Financial
7/26/00	PHA Reports 2Q00 EPS \$0.74/+18%, In Line with Expectations - Pharmacia Corporation	A.G. Edwards & Sons, Inc.
7/26/00	Pharmacia Corporation - Q2 00 Report - Strong Top-Line Growth	Danske Securities
7/26/00	Pharmacia Corporation: 2Q EPS Up 18%, as Expected, Driven by Sharply	DLJ Securities
7/26/00	Pfizer Inc. Reports Second Quarter EPS of \$0.23, \$0.01 Shy of Our Estimate on Lower Than Expected Revenues for Key Products; Lowering 2000-2004 Revenue Projections Though Maintain EPS Estimates as Company Gains Efficiencies from Warner Lambert Acquisition; Product Portfolio Impressive with Seven Billion-Dollar Products, R&D Budget of \$4.7 Billion for 2000; Reiterate 1-1 Rating.	Gruntal & Co. L.L.C.
7/26/00	Pharmacia - AG Cloud Lifting-Celebrex's Strength Shining Through	JP Morgan
7/26/00	Pfizer - 2Q Earnings-Light Us Drug Sales not Supported by Prescription Data Reiterate Buy	JP Morgan Americas Archive
7/26/00	Comment - Pharmacia Corp. - Pharmacia 2Q: Growing Like a Round Up-Resistant Weed	Merrill Lynch
7/26/00	Bulletin - Pharmacia Corp. - Pharmacia 2Q: Growing Like a Round Up-Resistant Weed	Merrill Lynch
7/26/00	Pharmacia Corp. - PHA is Off to the Races	Morgan Stanley Dean Witter
7/26/00	Pharmacia Corp.: Strong Second Quarter; Raising Target	Paine Webber
7/26/00	Pfizer: Some Confusion, but Underlying Trends Remain Very Solid	Paine Webber
7/26/00	Pfizer Inc. - Pfizer: Some Confusion, but Underlying Trends Remain Very Solid	Paine Webber
7/26/00	Pharmacia Corporation - H2 Earnings Growth Acceleration on Tap Post a Convincing Q2	SG Cowen
7/26/00	Pfizer - PFE Posts Solid Q2 EPS; Full Year Expectations Intact	SG Cowen
7/26/00	Pharmacia Corp.: Strong Second Quarter; Raising Target - Part 1 of 2	Paine Webber
7/26/00	Pharmacia Corp.: Strong Second Quarter; Raising Target - Part 2 of 2	Paine Webber
7/27/00	Pfizer Inc. - Pfizer's Second Quarter - Hardly a Cause for Concern	Arnhold and S. Bleichroeder, Inc.
7/27/00	Pfizer Inc. - Update from PFE 2Q00 EPS Call	CIBC World Markets
7/28/00	Pharmacia Corporation - Pharmacia Reports 2Q00 EPS of \$0.47, In Line with our Estimate and \$0.01 above Consensus	Banc of America Securities
7/31/00	Pharmacia Corporation	SG Cowen
8/3/00	Pharmacia Corp - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
8/7/00	Pharmacia Corporation - PHA: Xalatan Competitor Approved	Salomon Smith Barney
8/7/00	Estimate Change - Pharmacia Corporation - PHA: Xalatan Competitor Approved	Salomon Smith Barney
8/9/00	Elan Corp., PLC Aligns with Pharmacia Corporation for Alzheimer's Research; Reiterate 1-1 Rating.	Gruntal & Co. L.L.C.
8/10/00	Pfizer Inc. (NYSE: PFE) - Sales Light, but Underlying Demand Remains Strong	Morgan Stanley Dean Witter
8/11/00	Pfizer Inc. - Upbeat Meeting with Chairman, President, CFO. Expect Stock to Rebound as Investor Confidence Returns.	Bear Stearns & Co. Inc.
8/14/00	Pharmacia - Meeting with Management Bolsters Our Confidence	SG Cowen
8/15/00	In-Depth - Analysis of Sales/Earnings - Pharmacia Corp. - PHA is Off to the Races	Morgan Stanley Dean Witter
8/15/00	Analysts' Best Calls - Pharmacia Corp. (PHA)	Paine Webber
8/17/00	Pharmacia Corp. - Pharmacia Corp.: July Prescription Data	Paine Webber
8/17/00	Pharmacia Corp.: July Prescription Data - Part 1 of 2	Paine Webber
8/17/00	Pharmacia Corp.: July Prescription Data - Part 2 of 2	Paine Webber
8/21/00	Sugen, Inc. - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Hepar Inc. - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp./Allergon Division - Corporate Technology Information Services	Thomson Financial
8/21/00	Kelco Biopolymers, Corp. - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp./AG Sector- Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp./Oncology Business Unit - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp./Animal Health Division - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp./Diagnostics Division - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp./Consumer Healthcare Division - Corporate Technology Information Services	Thomson Financial
8/21/00	Pharmacia Corp. - Corporate Technology Information Services	Thomson Financial

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8/23/00	Pharmacia Corporation - Strong Volume Gains and Synergies to Fuel Rapid EPS Growth - Part 1 of 2	DLJ Securities
8/23/00	Pharmacia Corporation - Strong Volume Gains and Synergies to Fuel Rapid EPS Growth - Part 2 of 2	DLJ Securities
8/24/00	Bulletin - Pharmacia Corp. - Pharmacia: Value Remains	Merrill Lynch
8/26/00	Monsanto-Sweetner Ingredient/JW Childs Equity Partners II - Thomson Financial Securities Data - M&A	Thomson Financial
9/6/00	Investment Analysis - Pharmacia Corp. - Highlights	Argus Research Company
9/7/00	Pharmacia Corp. - Pharmacia Corp: EPS Implications of the Monsanto IPO	Paine Webber
9/7/00	Pharmacia Corp: EPS Implications of the Monsanto IPO	Paine Webber
9/7/00	Pharmacia Corp. & Upjohn Inc. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
9/12/00	Pharmacia Corp. & Upjohn Inc. - History & Debt - Financial Information Services - Mergent FIS - History & Debt	Thomson Financial
9/14/00	Pharmacia Corp. - Pharmacia Corp.: August Prescription Data	Paine Webber
9/14/00	Pfizer Inc.: August Prescription Data (Part 1 of 2)	Paine Webber
9/14/00	Pfizer Inc.: August Prescription Data (Part 2 of 2)	Paine Webber
9/14/00	Pfizer Inc. - Pfizer Inc.: August Prescription Data	Paine Webber
9/15/00	Pharmacia Corp. (PHA) - Positive R&D Presentation by Dr. Needleman	Bear Stearns & Co., Inc.
9/19/00	Top Pick Reiterated - Pharmacia Corporation - COX-2 Pendulum Poised to Swing PHA's Way	ABN AMRO Incorporated
9/22/00	Pharmacia Corp. - Sweden Pharmaceuticals	Carnegie
9/30/00	Kelco Biopolymers/Investor Group [BRIEF] - Thomson Financial Securities Data - M&A	Thomson Financial
10/5/00	Pharmacia Corp. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
10/11/00	Pharmacia Corporation - Pharmacia Corporation: Lowering our FY00 EPS Estimate from \$1.55 to \$1.52, Maintaining a Buy Rating	Banc of America Securities
10/18/00	Pharmacia Corporation - Good News: Monsanto IPO Done - Bad News: On Dilutive Terms	SG Cowen
10/19/00	Pharmacia Corp. - Pharmacia Corp.: September Prescription Data	Paine Webber
10/19/00	Pharmacia Corp. - Pharmacia Corp.: September Prescription Data - Part 1 of 2	Paine Webber
10/19/00	Pharmacia Corp.: September Prescription Data - Part 2 of 2	Paine Webber
10/19/00	Indiainfoline Company Result Update - Monsanto Chemicals of India Ltd - Results (Q2 FY2001)	Indiainfoline
10/20/00	Pharmacia Corporation (PHA) - PHA: Focus on Pharma	Salomon Smith Barney
10/20/00	Pharmacia Corporation - PHA: Focus on Pharma - Part 1 of 2	Salomon Smith Barney
10/20/00	Pharmacia Corporation - PHA: Focus on Pharma - Part 2 of 2	Salomon Smith Barney
10/21/00	Monsanto - Tabletop Sweetener/Investor Group [BRIEF] - Thomson Financial Securities Data - M&A	Thomson Financial
10/23/00	Pfizer (PFE) - PFE: 3Q 2000 EPS Prep Pack	Salomon Smith Barney
10/24/00	Pfizer - 3Q Earning Beats by \$0.02, but Sales a Touch Light - No Long Term Concerns	JP Morgan
10/24/00	Pfizer (PFE) - PFE: 3Q 2000 EPS	Salomon Smith Barney
10/26/00	Pharmacia Corp. & Upjohn Inc. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
10/27/00	Pharmacia Corp. - Q3 00 Preview - Report Due on October 30	Danske Securities
10/27/00	Pharmacia Corporation (PHA) - PHA: 3Q 2000 EPS Prep Pack	Salomon Smith Barney
10/30/00	PHA Reports 3Q00 EPS \$0.33/+57%, In Line with Expectations	A.G. Edwards & Sons, Inc.
10/30/00	Pharmacia (PHA.ST) - Saved by Turnover	Carnegie
10/30/00	Pfizer - 3Q Earning Beats by \$0.02, but Sales a Touch Light - No Long Term Concerns	Deutsche Bank Alex. Brown
10/30/00	Pharmacia - Revised Forecast due to One-Offs	Handelsbanken Investment Banking
10/30/00	Bulletin - Pharmacia Corp. - 3Q00: Searle Issues on the Table-Take Advantage of the Situation	Merrill Lynch
10/30/00	Pharmacia Corporation (PHA) - PHA: EPS Outlook Downgraded	Salomon Smith Barney
10/30/00	Pharmacia Corp - 9M(00) Previews	Carnegie
10/30/00	Research - Pharmacia - Q3(00) Update	Carnegie
10/30/00	Equity Research - Pharmacia Corporation (PHA) - Q300 Results In Line, but Lowering Estimates for 4Q 2000 and Full Year 2001--Reiterate Market Perform Rating	Deutsche Bank
10/30/00	Pharmacia Corporation - PHA: 3Q 2000 EPS Prep Pack	Salomon Smith Barney
10/31/00	Pharmacia Corp. (PHA) - Lowering EPS Estimates for 2000-2001, Intermediate Term Investment Thesis Intact	Bear Stearns & Co., Inc.
10/31/00	Pharmacia Corp. - Q3 00 Preview - Revised Earnings Outlook	Danske Securities
10/31/00	Pharmacia - Solid 3rd Qtr; but Company Lowers EPS Guidance; Downward Revision Risk now Over-Buy	J.P. Morgan Securities Inc.
10/31/00	Pharmacia - Solid 3rd Qtr; but Company Lowers EPS Guidance; Downward Revision Risk now Over-Buy	JP Morgan
10/31/00	Pharmacia Corp. - Management Lowers Guidance in 2000 and 2001	Morgan Stanley Dean Witter
10/31/00	Pharmacia Corp. - Pharmacia Corp.: 3Q EPS In-Line, Quality Light; Lowering 4Q00 & 2001 Estimates	Paine Webber
10/31/00	Equity Research - Pharmacia Corporation - 3Q00 EPS Reflect Strength but Licensing Issues to Clip EPS	CIBC World Markets
10/31/00	Pharmacia Corp. - 3Q00 Report	Danske Securities
10/31/00	Pharmacia Corp. - Pharmacia Corp.: 3Q EPS In-Line, Quality Light; Lowering 4Q00 & 2001 Estimates - Part 1 of 2	Paine Webber
10/31/00	Pharmacia Corp.: 3Q EPS In-Line, Quality Light; Lowering 4Q00 ... - Part 2 of 2	Paine Webber

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10/31/00	Pharmacia Corporation (PHA) - PHA: EPS Outlook Downgraded	Salomon Smith Barney
11/1/00	Pfizer Inc. - Seven Significant New Products in Pipeline; Expects 2000 Revenue of \$30 Billion	Gruntal & Co.
11/1/00	Pfizer Inc. (PFE - NYSE)- Cost Savings from Warner-Lambert Merger Help Third Quarter EPS Rise 29%	Hilliard Lyons
11/2/00	Pharmacia Corp. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
11/7/00	Earnings Estimate Revision - Pharmacia Corporation	PNC Advisors
11/7/00	Pharmacia Corp - History & Debt - Financial Information Services - Mergent FIS - History & Debt	Thomson Financial
11/8/00	Equity Research - Pharmacia Corp. - Pharmacia: Merger with Monsantoalters	Raymond James
11/13/00	Monsanto - MON: Initiation of Coverage - Part 1 of 2	Salomon Smith Barney
11/13/00	MON: Initiation of Coverage - Part 2 of 2	Salomon Smith Barney
11/13/00	Initiating Coverage - Monsanto (MON) - MON: Initiation of Coverage	Salomon Smith Barney
11/13/00	Monsanto - Morning Call Data Summary	Salomon Smith Barney
11/16/00	Comment - Company Update - Pharmacia Corp. - PHA - Monsanto Provides Transparency on Rx Value	Morgan Stanley Dean Witter
11/16/00	Research Note - Pharmacia Corp. - Pharmacia Corp.: October Prescription Data	UBS Warburg
11/16/00	Monsanto - Roundup Helps Make Things Grow	Salomon Smith Barney
11/17/00	Pharmaceuticals - Pharmacia Corporation - A Solid Product-Driven Growth Story	ING Barings
11/29/00	PM Call: PHA: Initiating Coverage with a Buy	Credit Suisse First Boston Corporation
11/30/00	Pfizer Inc. (NYSE: PFE) - Poised for Rebound	Morgan Stanley Dean Witter
11/30/00	Equity Research - Monsanto - Ag Biotech/Fertilizers	Salomon Smith Barney
12/4/00	PM Call: MON: Initiating Coverage with a Hold Rating - Part 1 of 2	Credit Suisse First Boston Corporation
12/4/00	PM Call: MON: Initiating Coverage with a Hold Rating - Part 2 of 2	Credit Suisse First Boston Corporation
12/5/00	Pharmacia Corporation - Uniquely Positioned Pharmaceutical Growth Platforms	Credit Suisse First Boston
12/13/00	Research Note - Monsanto Co. - Monsanto: Biotech Cotton Already in Argentina	UBS Warburg
12/13/00	Research Note - Monsanto Co. - Monsanto: Initiating Coverage with a Buy Rating -- Closing the Value Gap	UBS Warburg
12/14/00	Pharmacia Corp. & Upjohn Inc. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
12/14/00	Research Note - Pharmacia Corp. - Pharmacia Corp.: November Prescription Data	UBS Warburg
12/19/00	Pharmacia Corp. & Upjohn Inc. - History & Debt - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
12/22/00	Pharmacia Corp - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
12/22/00	Initiation of Coverage - Monsanto Company - Closing the Value Gap	UBS Warburg
1/5/01	PHA: 4Q Preview (Pt 1)	Credit Suisse First Boston
1/5/01	PHA: 4Q Preview (Pt 2)	Credit Suisse First Boston
1/8/01	PFE: 4Q Preview-PT1	Credit Suisse First Boston
1/8/01	PFE: 4Q Preview-PT1	Credit Suisse First Boston
1/11/01	Pharmacia Corporation - Pharmaceuticals Franchise Should Deliver Another Good Year in 2001	SG Cowen
1/11/01	Pharmacia Corporation	SG Cowen
1/12/01	Comment - Pharmacia Corp. - Celebrex Sales in 4Q Likely to be Bolstered by a Price Increase	Merrill Lynch
1/18/01	Pharmacia Corp.: December Prescription Data	UBS Warburg
2/5/01	Pharmacia Corp. - Celebrex in Focus	Handelsbanken/ Investment Banking
2/6/01	Pfizer - Ziprasidone Approval with Good Label a Positive for PFE	SG Cowen
2/6/01	Pfizer Inc - PFE: Ziprasidone Approved, Label Better Than Expected, Raising Revenue Estimates	UBS Warburg
2/7/01	Pfizer - Zeldox Labeling Exceeds Expectations	ABN-AMRO
2/7/01	Pharmacia Corp. (PHA) - FDA Unlikely to Improve Celebrex Label	Bear Stearns
2/7/01	Pharmacia - FDA Review of Celebrex more Negative than Expected - Panel Could be Controversial	J.P. Morgan Securities
2/7/01	Pharmacia - FDA Review of Celebrex More Negative Than Expected - Panel Could Be Controversial	JP Morgan
2/7/01	Pfizer - FDA Review of Celebrex More Negative Than Expected - Panel Could Be Controversial	JP Morgan Americas Archive
2/7/01	Pharmacia Corporation - PHA: FDA Reviews Celebrex & Vioxx Safety Data	Salomon Smith Barney
2/8/01	Pharmacia Corporation - Vioxx Prevails, Celebrex Uncertain	CIBC World Markets
2/8/01	Pfizer Inc.- Seven Product Launches Expected Over Two Years Bolstered by \$5 Billion R&D Budget	Gruntal & Co.
2/8/01	Pharmacia Corp. - Class Trial - Something Ventured, Nothing Gained	Merrill Lynch
2/8/01	Pfizer Inc.- No GI Warning Change Recommended for Celebrex; Vioxx Up Next	Robertson Stephens
2/8/01	Merck & Co., Inc. - MRK: Vioxx Celebrex at FDA (Day 2)	Salomon Smith Barney
2/8/01	Pharmacia/Pfizer - No Change to Outlook for Celebrex Post FDA Panel Review of Class	SG Cowen
2/8/01	Pharmacia Corporation - CLASS Flunks Out	CIBC World Markets
2/8/01	PHA: No Change Recommended for Celebrex Labeling - Pt 1	Credit Suisse First Boston
2/8/01	PHA: No Change Recommended for Celebrex Labeling - Pt 2	Credit Suisse First Boston
2/8/01	Pharmacia Corp.	Thomson Financial
2/9/01	Pharmacia Corp. - Labelling Concerns Continue for Celebrex	Enskilda Securities

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2/9/01	Pharmacia Corporation - PHA: EPS Prep Pack, 4Q 2000	Enskilda Securities
2/9/01	PHA: EPS Prep Pack, 4Q 2000	Salomon Smith Barney
2/12/01	PHA Reports 4Q00 and 2000 Results - \$0.32/+33% and \$1.45/+31% - Pharmacia Corporation (PHA: \$54.51)	A.G. Edwards & Sons, Inc.
2/12/01	PHA Reports 4Q00 and 2000 Results - \$0.32/+33% and \$1.45/+31% - Pharmacia Corporation (PHA: \$54.23)	A.G. Edwards & Sons, Inc.
2/12/01	Pharmacia Corporation - Pharmacia Reports Q4'00 EPS of \$0.32, In Line With Our Estimate and Consensus	Banc Of America Securities
2/12/01	Pharmacia Corporation - Pharmacia Delivers In-Line 4th Quarter; Margin Story Continues to Unfold	Bear Stearns
2/12/01	Pharmacia Corp. - Celebrex Sales in 4Q Likely to be Bolstered by a Price Increase	Merrill Lynch
2/12/01	Pfizer - Revenue Acceleration, Pipeline Visibility Should Drive Stock in 2001	SG Cowen
2/12/01	Pharmacia Corporation (PHA: \$54.51) - PHA Reports 4Q00 and 2000 Results	A.G. Edwards
2/12/01	Pharmacia Corporation (PHA: \$54.23) - PHA Reports 4Q00 and 2000 Results	A.G. Edwards
2/12/01	Q4(00) Previews - Pharmacia Corp.	Carnegie
2/13/01	Pharmacia - Solid 4th Quarter, Driven by Strong Celebrex (Esp. International) - But Guidance Nudged Downward	JP Morgan
2/13/01	Pharmacia Corp. - PHA: Earnings In-Line with Expectations... Lowering 2001 Estimate	Merrill Lynch
2/13/01	Pharmacia Corp. - In-Line EPS and "Tightened Guidance"	Morgan Stanley Dean Witter
2/13/01	PHA: On Target 4Q up 33% - Pt 1	Credit Suisse First Boston
2/13/01	PHA: On Target 4Q up 33% - Pt 2	Credit Suisse First Boston
2/13/01	Pharmacia Corp. - Fourth Quarter Earnings: Don't Believe the Hype	Raymond James
2/13/01	Pharmacia Corp - History & Debt	Thomson Financial
2/13/01	Pharmacia Corp. - 4Q00 EPS In-Line But Lowering 2001 Estimates	UBS Warburg
2/14/01	Pharmacia Corporation (PHA) - 4Q00 Earnings in Line with Consensus, Driven by Strong Growth in US Pharma Business -- Maintaining BUY Rating	Deutsche Bank Alex. Brown
2/15/01	Pharmacia Corp. - PHA: Earnings In-Line with Expectations...Lowering 2001 Estimate	Merill Lynch
2/15/01	Pfizer Inc. - Script Sense: Monthly--Analysis of January 2000 Prescription Trends	Robertson Stephens
2/15/01	Pharmacia Corporation - PHA: 4Q EPS Review & Outlook	Solomon Smith Barney
2/15/01	PHA: 4Q EPS Review & Outlook - Part 1 of 2	Salomon Smith Barney
2/15/01	PHA: 4Q EPS Review & Outlook - Part 2 of 2	Salomon Smith Barney
2/16/01	Pharmacia Corp.	Thomson Financial
2/20/01	Pharmacia Corporation - COX-2 Franchise Strength Undervalued	ABN AMRO
2/20/01	Pharmacia Corp - History & Debt	Thomson Financial
2/21/01	Allergan (AGN) - Glaucoma Abstracts Available - Lumigan Potential Best-in-Class, but Travoprost Emerges as a Real Contender	Credit Suisse First Boston Corporation
2/22/01	Pharmacia Sweden Signs Deal with Framfab	Framfab Health
2/22/01	Pharmacia Sweden Signs Deal with Framfab	Framfab Health
2/22/01	Pfizer Inc. - Update from Meeting with Management	Morgan Stanley Dean Witter
2/22/01	Pharmacia Sweden - Pharmacia Sweden Signs Deal with Framfab	Hugin
2/22/01	Pharmacia Sweden - Pharmacia Sweden Signs Deal with Framfab	Hugin
2/26/01	Pharmacia Corp. - Pharmacia: Upgrading to Buy on Valuation	UBS Warburg
2/27/01	Pharmacia Corp./Consumer Healthcare Division	Thomson Financial
2/27/01	Pharmacia Corp./Animal Health Division	Thomson Financial
2/27/01	Pharmacia Corp./Sector (Ag)	Thomson Financial
2/27/01	Pharmacia Corp./Diagnostics Division	Thomson Financial
2/27/01	Pharmacia Hepar Inc.	Thomson Financial
2/27/01	Pharmacia Corp./Allergon Division	Thomson Financial
2/27/01	Kelco Biopolymers	Thomson Financial
2/27/01	Sugen, Inc.	Thomson Financial
2/27/01	Pharmacia Corp./Oncology Business Unit	Thomson Financial
2/27/01	Pharmacia Corp.	Thomson Financial
2/27/01	Sugen, Inc.	Thomson Financial
2/27/01	Pharmacia Hepar Inc.	Thomson Financial
2/27/01	Pharmacia Corp./Allergon Division	Thomson Financial
2/27/01	Kelco Biopolymers, Corp.	Thomson Financial
2/27/01	Pharmacia Corp./Sector (Ag)	Thomson Financial
2/27/01	Pharmacia Corp./Animal Health Division	Thomson Financial
2/27/01	Pharmacia Corp./Diagnostics Division	Thomson Financial
2/27/01	Pharmacia Corp./Consumer Healthcare Division	Thomson Financial
2/27/01	Pharmacia Corp./Oncology Business Unit	Thomson Financial
2/27/01	Pharmacia Corp.	Thomson Financial
2/27/01	Monsanto Animal Nutrition	Thomson Financial
2/27/01	Monsanto Animal Nutrition	Thomson Financial
3/5/01	Pharmacia Corp. (PHA) - Pharmacia In-Licenses Anti-Arthritis Drug from Celltech Group	Bear Stearns
3/5/01	Celltech Group - Celltech Licenses CDP 870 to Pharmacia Corporation	Bear Stearns
3/6/01	PHA: Announced Partnership with Celltech to Co-Develop	Credit Suisse First Boston
3/6/01	Pharmacia Corp. - CDP-870: Bolstering the Arthritis Pipeline	Morgan Stanley
3/8/01	PHA: Completes Sensus Acquisition, Somavert Profile	Salomon Smith Barney
3/8/01	Pharmacia Corporation (PHA) - PHA: Completes Sensus Acquisition, Somavert Profile	Salomon Smith Barney

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3/13/01	Pharmacia Corp. - Pharmacia (MO): New Guidance for 2001, 2000 Quarters Reset	Goldman Sachs
3/13/01	Pharmacia Corporation - PHA: Reaffirms 2001 EPS Growth Target of 20% and Restates 2000 Quarterly EPS	Solomon Smith Barney
3/13/01	PHA: Reaffirms 20% EPS Growth for 2001 - Part 1 of 2	Credit Suisse First Boston
3/13/01	PHA: Reaffirms 20% EPS Growth for 2001 - Part 2 of 2	Credit Suisse First Boston
3/13/01	PHA: Reaffirms 2001 EPS Growth Target of 20% and Restates 2000 Quarterly EPS	Salomon Smith Barney
3/14/01	Pharmacia Corp. - Pharmacia: Rebased Quarterly EPS Pattern but EPS Growth Unchanged	UBS Warburg
3/15/01	Pharmacia Corp. - Updating Earnings Model for New Accounting Standard	Raymond James
3/15/01	Pharmacia Corp. - Pharmacia Corp.: February Prescription Data	UBS Warburg
3/19/01	Pharmacia - Pharmaceuticals Franchise Should Deliver Another Good Year in 2001	SG Cowen
3/19/01	Pharmacia Corporation (PHA) - PHA: Xalatan Competition & Litigation Update	Salomon Smith Barney
3/19/01	PHA: Xalatan Competition & Litigation Update - Part 2 of 2	Salomon Smith Barney
3/19/01	Pharmacia Corporation (PHA) - PHA: Xalatan Competition & Litigation Update	Salomon Smith Barney
3/19/01	Pharmacia	SG Cowen
3/20/01	Pharmacia Corp. - Positive Celebrex Safety Data Reconfirmed at ACC Meeting	Merrill Lynch
3/23/01	Pfizer Inc. - Valdecocix Filed with FDA; Cox-2 Race Heating Up	Robertson Stephens
3/26/01	Pharmacia Corporation (PHA) - PHA: Valdecocix NDA Filed	Salomon Smith Barney
3/26/01	Pharmacia Corporation (PHA) - PHA: Valdecocix NDA Filed	Salomon Smith Barney
3/29/01	Pharmacia Corporation - PHA: Japan MOHW asks for Celebrex Phase III Studies	Salomon Smith Barney
3/29/01	Pharmacia Corporation - Investment Conclusion	CIBC World Markets
3/29/01	Pharmacia Corporation (PHA) - PHA: Japan Mohw Asks for Celebrex Phase III Studies	Salomon Smith Barney
3/29/01	Pharmacia Corporation (PHA) - PHA: Japan Mohw Asks for Celebrex Phase III Studies	Salomon Smith Barney
3/30/01	Pharmacia Corporation (PHA) - PHA: Japan Mohw Asks for Celebrex Phase III Studies	Salomon Smith Barney
3/30/01	Pharmacia Corp.	Thomson Financial
3/30/01	Pharmacia Corp./Oncology Business Unit	Thomson Financial
3/30/01	Pharmacia Corp./Animal Health Division	Thomson Financial
3/30/01	Pharmacia Corp./Sector (Ag)	Thomson Financial
3/30/01	Kelco Biopolymers, Corp.	Thomson Financial
3/30/01	Pharmacia Hepar Inc.	Thomson Financial
4/3/01	Pharmacia - First Quarter Preview and Update: Projecting 18% Increase in First Quarter EPS - Superior Growth Profile Intact	Credit Suisse First Boston
4/4/01	Pharmacia - First Quarter Preview and Update: Projecting 18% Increase in First Quarter EPS- Superior Growth Profile Intact	Credit Suisse
4/5/01	PHA: First Quarter Preview and Update	Credit Suisse First Boston
4/12/01	Pharmacia Corp.	Thomson Financial
4/16/01	Pfizer Inc - Celebrex Approvable Letter... Remember the Data!	Lehman Brothers
4/17/01	PFE: Estimating 1QEPS of \$0.31, Up 23%	Tucker Anthony Sutro
4/17/01	Proxy Analysis: Pharmacia Corporation	Thomson Financial
4/18/01	Pfizer - PFE Reports 1Q01 - \$0.33 / +32%, \$0.02 Above Age and Consensus	A.G. Edwards
4/18/01	Pfizer Inc. - Robust Pharmaceutical Sales Highlight Solid First Quarter	Bear Stearns
4/18/01	PFE: Strong Pharm Drives +32% Increase in 1Q EPS - Pt1	Credit Suisse First Boston
4/18/01	PFE: Strong Pharm Drives +32% Increase in 1Q EPS - Pt2	Credit Suisse First Boston
4/18/01	PFE: Strong Pharm Drives +32% Increase in 1Q EPS - Pt31	Credit Suisse First Boston
4/18/01	Pfizer Inc. - Pfizer Reports \$0.33 for Q1; Beating Consensus by \$0.02	Dain Rauscher Wessels
4/18/01	Pfizer Inc. [PFE] - 1Q01 EPS of \$0.33 Exceed Expectations, Lipitor Sales Strong, Geodon off to a Good Start-- Increasing EPS Estimates by \$0.02, Maintain Market Perform Rating	Deutsche Banc Alex. Brown Inc.
4/18/01	Pharmacia Corp. - Celebrex Affected by Last Year's Inventory Build-up	Lehman Brothers
4/18/01	Pfizer Inc. Script Sense: Monthly-- Analysis of March 2001 Prescription Trends	Robertson Stephens
4/18/01	PFE: First Quarter EPS	Salomon Smith Barney
4/18/01	Pfizer (PFE) - PFE: First Quarter EPS	Salomon Smith Barney
4/18/01	Pharmacia Corp. - Celebrex Affected by Last Year's Inventory Build-Up	Enskilda Securities
4/19/01	Pfizer Inc. - 1Q01 EPS: Merger Savings Drive EPS Growth	CIBC World Markets
4/19/01	Pfizer Inc. - Pfizer Inc.'s First-Quarter 2001 EPS of \$0.33 is Up 32% and Ahead of Our \$0.31 Estimate; Double-Digit Revenue Growth Forecasted for 2001; Await a Host of New Product Launches by 2002 Driven by \$5 Billion R&D Budget; Reiterate 1-1 Rating	Gruntal & Co. L.L.C.
4/19/01	Pfizer - Beats 1st Quarter by \$0.02 on Lower Spending from Merger Synergies & Favorable FX	JP Morgan Americas Archive
4/19/01	Pharmacia Corp. - Celebrex Revenue Scenarios for 1Q:01	Merrill Lynch
4/19/01	Pfizer Inc. (NYSE: PFE) - Cost-Cutting Drives Two Cent Surprise	Morgan Stanley Dean Witter
4/19/01	Pfizer Inc. (PFE:NYSE) - Pfizer: First Quarter Earnings Are Less Than They Appear	Raymond James & Associates, Inc.
4/19/01	Pfizer - Sales Acceleration on Tap in 2001 Post Solid Q1 Results	SG Cowen
4/19/01	Pharmacia Corp. - March Prescription Data	UBS Warburg
4/19/01	Pfizer Inc - Pfizer: 1Q01 EPS Beats Estimates; Revenues Light, but Expect Q2 Acceleration	UBS Warburg
4/23/01	Pharmacia Corp. - Q1 de-stocking Impacts COX-II Drugs	Enskilda Securities
4/24/01	Pharmacia Corporation - PHA: EPS Prep Pack, 1Q 2001	Salomon Smith Barney
4/24/01	Pharmacia Corporation (PHA) - PHA: EPS Prep Pack, 1Q 2001 - Part 1 of 2	Salomon Smith Barney
4/24/01	PHA: EPS Prep Pack, 1Q 2001 - Part 2 of 2	Salomon Smith Barney
4/25/01	PHA Reports 1Q01 of \$0.32, In Line - Celebrex Disappoints - Pharmacia Corporation (PHA 48.01 - NYSE)	A.G. Edwards, Sons, Inc.

Date	Title	Source
4/25/01	PHA Reports 1Q01 of \$0.32, In Line - But Celebrex Disappoints - Pharmacia Corporation (PHA 49.10 NYSE)	A.G. Edwards, Sons, Inc.
4/25/01	Pharmacia Corp. - Pharmacia Delivers Solid Q1	Bear Stearns
4/25/01	Pharmacia Corporation (PHA) - 1Q01 EPS in Line with Expectations in Spite of Celebrex Buy-Out in the Quarter -- Maintaining Estimates and Reiterating BUY Rating	Deutsche Bank Alex. Brown
4/25/01	Pharmacia Corp. - Q1: Positive Impact of Celebrex Q2 2001	Enskilda Securities
4/25/01	Pharmacia Corp. - PHA (MO): 1Q01 Fast Facts	Goldman Sachs
4/25/01	Pharmacia Corp. - PHA (MO): In Line Quarter, Maintain MO	Goldman Sachs
4/25/01	Pharmacia Corp. - PHA: In-Line 1Q EPS, 2001 EPS Outlook	Merrill Lynch
4/25/01	Pharmacia Corporation - 1Q01 EPS In Line with Expectations in Spite of Celebrex Buy-Out in the Quarter--Maintaining Estimates and Reiterating BUY Rating	Deutsche Bank
4/26/01	Pharmacia Corporation - First-Quarter 2001 Earnings in Line with Expectations; Celebrex Sales Trends Should Benefit from Remarkable Safety Profile	Arnhold & S. Bleichroeder, Inc.
4/26/01	Pfizer Inc - First Quarter EPS Up 32% on Strong Drug Sales and Merger Related Savings	Hilliard Lyons
4/26/01	Pharmacia - In-Line 1st Quarter - With Better Than Expected Pharmaceutical Sale	J.P. Morgan Securities Inc
4/26/01	Pharmacia - In-Line 1st Quarter - With Better Than Expected Pharmaceutical Sales (esp. Celebrex - International)	JP Morgan
4/26/01	Pharmacia Corp. - High Quality Characterizes a Solid 1Q	Morgan Stanley Dean Witter
4/26/01	Pharmacia Corp. - Pharmacia Corp: - 1Q01 EPS In Li-e, Growth Among the Highest for Our Universe	UBS Warburg
4/26/01	Pharmacia Corporation - Investment Conclusion	CIBC World Markets
4/26/01	PHA: On Target 1Q EPS - Pt 1	Credit Suisse First Boston
4/26/01	PHA: On Target 1Q EPS - Pt 2	Credit Suisse First Boston
4/26/01	PHA: On Target 1Q EPS - Pt 3	Credit Suisse First Boston
4/26/01	Pharmacia Corp. - Pharmacia Skimps on R&D, Hits Muted Earnings Target	Raymond James
4/26/01	Pharmacia Corp. - Pharmacia Corp.: 1Q01 EPS In Line, Growth Among the Highest for Our Universe	UBS Warburg
4/27/01	Pharmacia Corporation - Pharmacia Corp. Reports Q1'01 EPS of \$0.32, In-Line With Our Forecast and Consensus	Banc of America Securities
4/27/01	Pharmacia Corp./Animal Health Division	Thomson Financial
4/27/01	Pharmacia Corp.	Thomson Financial
4/27/01	Pharmacia Corp./Sector (Ag)	Thomson Financial
4/27/01	Pharmacia Corp./Allergon Division	Thomson Financial
4/30/01	Pharmacia Corp. - PHA: Power Brunch with Tim Rothwell	Morgan Stanley
5/7/01	Pharmacia Corp. - Rebasings EPS Estimates to Reflect Ambien Profit Hit	Morgan Stanley Dean Witter
5/8/01	Pharmacia Corp. (PHA) - Reducing Estimates, 2001 \$55-\$60 Target Price Pushed to 2002	Bear Stearns
5/8/01	Pharmacia Corp. - Reducing Estimates, 2001 \$55-\$60 Target Price Pushed to 2001	Bear Stearns
5/10/01	Pharmacia Corp. - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
5/14/01	Pharmacia Corporation - Fundamentals Remain Favorable; However, We are Lowering Pharmacia's Growth Rate, Price Target and 2002 EPS to Reflect The Loss Of Ambien Revenues	Banc of America Securities
5/14/01	Morning Meeting Note - PHA: Give-back, SG&A Adjustments Prompts 02 EPS Fine-Tune to \$2.02	Credit Suisse First Boston
5/14/01	Pharmacia Corp. - EPS Lowered to Reflect Ambien's Effect on Margins	Morgan Stanley Dean Witter
5/15/01	Morning Meeting Note - PHA: CSFB is Removing from Focus List Due to EPS Reductions	Credit Suisse First Boston
5/16/01	Morning Meeting Note - Pharmaceuticals: Ophthalmology Opinion Leader Survey - Pt1	Credit Suisse First Boston
5/16/01	Morning Meeting Note - Pharmaceuticals: Ophthalmology Opinion Leader Survey - Pt2	Credit Suisse First Boston
5/17/01	Pharmacia Corporation - Pharmacia Corp: April Prescription Data	UBS Warburg
5/18/01	Earnings Estimate Revision - Pharmacia Corporation	PNC Advisors
5/21/01	Pharmacia - Vestra (depression) Rejected By FDA - Not A Surprise, But Will Impact Earnings in 2002 and Beyond	JP Morgan
5/21/01	Pharmacia - Another Setback, Vestra (depression) Rejected By FDA - Expectations Had Eased, But EPS Estimate Nudged Down	JP Morgan
5/21/01	Morning Meeting Note - PHA: Vestra "Non-Approvable" Letter Manageable	Credit Suisse First Boston
5/21/01	Pharmacia Corp. - Removing Vestra from Model after Non-Approvable Letter	Morgan Stanley Dean Witter
5/22/01	Pharmacia Corp: Higher Mortality Rates Seen in Patients Treated with Campptosar	UBS Warburg
5/23/01	Pharmacia - PHA: Initiating Coverage with A Strong Buy Rating (Part 1 of 2)	Prudential Financial
5/23/01	Pharmacia - PHA: Initiating Coverage with a Strong Buy Rating (Part 2 of 2)	Prudential Financial
5/24/01	Pharmacia Corporation - Pharma Earnings Ex-Ambien Growing 20%-Plus	Bear Stearns
5/26/01	Sensus Drug Development Corp. - Corporate Technology Information Services,...	Thomson Financial
5/26/01	Pharmacia Corp. - Corporate Technology Information Services,...	Thomson Financial
5/26/01	Pharmacia Corp. / Animal Health Division - Corporate Technology Information Services,...	Thomson Financial
5/26/01	Pharmacia Corp. / Sector (Ag) - Corporate Technology Information Services,...	Thomson Financial
5/26/01	Kelco Biopolymers, Corp. - Corporate Technology Information Services,...	Thomson Financial
5/29/01	Pfizer Inc - Earnings Estimate Revision	PNC Advisors
5/31/01	Pharmacia Expanded Its Distribution Contract with Tamro Finland	Tamro Corporation
6/8/01	Pharmacia Corp - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
6/12/01	Pharmacia Corp - History & Debt - Financial Information Services - Mergent FIS - History & Debt	Thomson Financial

Date	Title	Source
6/13/01	Pharmacia - Vestra (depression) Rejected By FDA - Not A Surprise, But Will Impact Earnings in 2002 and Beyond	Prudential Financial
6/13/01	Pharmacia - Initiating Coverage with a Buy Rating	Prudential Financial
6/14/01	Pharmacia Corporation: May Prescription Data	UBS Warburg
6/25/01	Pharmacia Corp. - Little Risk for Celebrex Forecasts	Enskilda Securities
6/25/01	Merck & Co - Bounding the COX-2 Inhibitor Issue	Morgan Stanley Dean Witter
7/1/01	Pharmacia	SG Cowen
7/10/01	Pharmacia Corp. - CEO Still Looking for 20% 2001-02 EPS Growth	Enskilda Securities
7/10/01	Pharmacia - PHA: Rheumatoid Arthritis Drug CDP-870 Could Be A Hit	Prudential Financial
7/13/01	Pfizer	SG Cowen
7/13/01	Pharmacia	SG Cowen
7/15/01	Pharmacia Corp. (PHA) - Parecoxib Delayed; Lowering 2002 and 2003 Estimates and Target Price to \$52	Bear Stearns
7/15/01	Pharmacia Corp. - Paracoxib Delay To Reduce 2002 EPS By \$0.04. Buy Maintained	Credit Suisse
7/15/01	Pharmacia Corporation - PHA: Parecoxib Gets FDA Not-Approvable Letter	Salomon Smith Barney
7/16/01	PHA: Parecoxib Received Non-Approvable Letter from FDA , Clouds PHA's Future until Approval of Valdecoxib Expected in January	A.G. Edwards
7/16/01	Pharmacia Corporation - Parecoxib Deemed "Not-Approvable" by the FDA	Arnhold & S. Bleichroeder, Inc.
7/16/01	Pfizer Inc. (NYSE:PFE) - Injectable Coxib Product to Be Co-Promotes by Pfizer is Delayed by FDA	Dain Rauscher Wessels
7/16/01	Pharmacia Corporation (PHA) - Another One Bites the Dust...Parecoxib Receives Non-Approvable Letter from FDA--Reducing Estimates, Again. A Poor Prognosis for the Drug Industry, Continued	Deutsche Bank Alex. Brown
7/16/01	Pharmacia Corp. - Another Blow Dealt by the FDA	Enskilda Securities
7/16/01	Pharmacia Corp. - PHA(MO): 'FDA Slowdown' Strikes Again, 'Non-Approvable' Letter for Parecoxib	Goldman Sachs
7/16/01	Parecoxib "Not Approvable" A Setback; Lowering EPS, But Growth Outlook Still Attractive - Reiterate Buy	J.P. Morgan Securities
7/16/01	Pharmacia - Parecoxib "Not Approvable" A Setback; Lowering EPS, But Growth Outlook Still Attractive - Reiterate Buy	JP Morgan
7/16/01	Pharmacia Corp. - The FDA Strikes Again...Parecoxib NDA Needs to be Supplemented	Merrill Lynch
7/16/01	Pharmacia Corp. - PHA: FDA Strikes Again	Morgan Stanley Dean Witter
7/16/01	Pharmacia Corporation - PHA: Parecoxib Setback A Modest Negative	Prudential Financial
7/16/01	Injectable Parecoxib Delayed; No Delay Likely for More Important Valdecoxib	Robertson Stephens
7/16/01	Pfizer Inc - Injectable Parecoxib Delayed; No Delay Likely for More Important Valdecoxib	Robertson Stephens
7/16/01	Pharmacia Corporation - PHA: Parecoxib Gets FDA Not-Approvable Letter	Salomon Smith Barney
7/16/01	PFE: EPS Prep Pack, 2Q 2001 (Part 1 of 3)	Salomon Smith Barney
7/16/01	PFE: EPS Prep Pack, 2Q 2001 (Part 2 of 3)	Salomon Smith Barney
7/16/01	PFE: EPS Prep Pack, 2Q 2001 (Part 3 of 3)	Salomon Smith Barney
7/16/01	Pfizer (PFE) - PFE: EPS Prep Pack, 2Q 2001	Salomon Smith Barney
7/16/01	Pharmacia Corp. - Pharmacia: Surprising Setback for Parecoxib, Reducing 2002 EPS & Target	UBS Warburg
7/16/01	Pharmacia Corp. - Doubts over COX-II Future	Enskilda Securities
7/16/01	Pharmacia Corp. - 2001 Forecasts Also Begin to Look Risky	Enskilda Securities
7/16/01	Pharmacia Corp. - 2Q01 EPS In-Line	Bear Stearns
7/17/01	Pfizer Inc. - PFE Reports 2Q01 Results In-Line with Some Issues, but the Future Looks Bright	A.G. Edwards
7/17/01	Comment - Pharmacia Corp. - The FDA Strikes Again...Parecoxib NDA Needs to be Supplemented	Merrill Lynch
7/17/01	Bulletin - Pharmacia Corp. - Celebrex Revenue Scenarios for 2Q:01	Merrill Lynch
7/18/01	Pfizer Inc. (NYSE: PFE) - PFE Posts Solid 2Q01 Results	Morgan Stanley Dean Witter
7/18/01	Pfizer Inc. - Pfizer 2Q01 Results: EPS (cont.ops/ex-charges) Above Consensus	Robertson Stephens
7/18/01	Sangamo BioSciences, Inc. (SGMO)	William Blair & Company, L.L.C.
7/19/01	Pharmacia Corp. - Pharmacia Corp.: June Prescription Data	UBS Warburg
7/23/01	Pharmacia Corporation - In-Line 2Q; Celebrex Inventories Normalize	Credit Suisse First Boston
7/23/01	Pharmacia Corp. - 2001 Forecasts also Begin to Look Risky	Enskilda Securities
7/23/01	Pharmacia Corporation (PHA) - PHA: EPS Prep Pack, 2Q 2001	Salomon Smith Barney
7/23/01	Morning Meeting Note - Pharmacia Corporation - PHA: EPS Prep Pack, 2Q 2001 (Part 1 of 2)	Salomon Smith Barney
7/23/01	Morning Meeting Note - Pharmacia Corporation - PHA: EPS Prep Pack, 2Q 2001 (Part 2 of 2)	Salomon Smith Barney
7/23/01	Morning Meeting Note - Pharmacia Corporation - PHA: In-Line 2Q, Celebrex Inventories Normalize - Pt1	Credit Suisse First Boston
7/23/01	Morning Meeting Note - Pharmacia Corporation - PHA: In-Line 2Q, Celebrex Inventories Normalize - Pt2	Credit Suisse First Boston
7/23/01	Morning Meeting Note - Pharmacia Corporation - PHA: First Take on PHA 2Q01-Buy	Deutsche Banc Alex. Brown Inc.
7/23/01	Morning Meeting Note - Pharmacia Corporation - PHA: 2Q EPS In-Line	Salomon Smith Barney
7/23/01	Pharmacia Corporation - PHA: 2Q EPS In-Line	Salomon Smith Barney
7/25/01	PHA Reported In Line 2Q01 EPS of \$0.63/+17%; Short Term Looks Good, but We have Longer Term Concerns - Pharmacia Corporation	A.G. Edwards
7/25/01	Pharmacia Corp. (PHA) - 2Q01 EPS In-Line	Bear Stearns

Date	Title	Source
7/25/01	PHA: First Take on PHA 2Q01-Buy - Pharmacia Corporation (PHA)	Deutsche Banc Alex. Brown Inc.
7/25/01	Pharmacia Corporation (PHA) - First Take on PHA 2Q01	Deutsche Bank Alex. Brown
7/25/01	Pharmacia Corp. - Less Growth, More Savings	Enskilda Securities
7/25/01	Pharmacia Corp. (PHA) - PHA (MO): 2Q01 Quick Hits	Goldman Sachs
7/25/01	Pharmacia Corp. (PHA) - PHA (MO): Reports In-Line 2Q01	Goldman Sachs
7/25/01	Pharmacia Corp. - EPS Targets Increasingly Risky	Enskilda Securities
7/26/01	PHA: 2Q01 EPS In-Line Part 1	Bear Stearns
7/26/01	PHA: 2Q01 Earnings in Line with Expectations -- Maintaining Buy Ra-Buy-Part 1/2	Deutsche Banc Alex. Brown Inc.
7/26/01	PHA: 2Q01 Earnings in Line with Expectations -- Maintaining Buy Ra-Buy-Part 2/2	Deutsche Banc Alex. Brown Inc.
7/26/01	Pharmacia Corp. - EPS Targets Increasingly Risky	Enskilda Securities
7/26/01	Pharmacia - Meets Consensus EPS Despite Celebrex De-Stocking; We See Valuation as Compelling Given Growth Outlook	JP Morgan
7/26/01	Pharmacia - Meets Consensus EPS Despite Celebrex De-Stocking; We See Valuation as Compelling Given Growth Outlook	JP Morgan
7/26/01	Bulletin - Pharmacia Corp. - PHA 2Q: In Line with Expectations	Merrill Lynch
7/26/01	Comment - Pharmacia Corp. - PHA 2Q: In Line with Expectations	Merrill Lynch
7/26/01	Pharmacia Corp. - High Expectations Met Despite Celebrex Weakness	Morgan Stanley Dean Witter
7/26/01	Pharmacia Corp.: High Expectations Met Despite Celebrex Weak... (Part 1 of 2)	Morgan Stanley/DW
7/26/01	Pharmacia Corp.: High Expectations Met Despite Celebrex Weak... (Part 2 of 2)	Morgan Stanley/DW
7/26/01	Pharmacia Corp. - Margins Picking Up in the Pharmaceutical Business - Celebrex Growth Expected in Ohman 2H	
7/26/01	Pharmacia Corporation - PHA: Made the Quarter -- Barely	Prudential Financial
7/26/01	Pharmacia Corp. (PHA:NYSE) - PHA: Extraordinary Charges Continue to Cloud Results	Raymond James
7/26/01	Celltech Group Plc - Celltech/Pharmacia Release Promising Headline Phase II Results for CDP 870 - FTSE All-Share: CCH LN [Euro] 9.94	Robertson Stephens
7/26/01	Celltech Group Plc - Celltech/Pharmacia Release Promising Headline Phase II Results for CDP 870 - CCH LN [Euro] 9.94	Robertson Stephens
7/26/01	Pharmacia Corporation (PHA) - PHA: 2Q EPS In-Line	Salomon Smith Barney
7/26/01	Pharmacia Corp. - Pharmacia (PHA): 2Q01 In-Line with Estimates; Top-Line Hunt by Inventory and Ag	UBS Warburg
7/26/01	Pharmacia Corp - Financial Information Services - Mergent FIS - Company Report	Thomson Financial
7/26/01	Pharmacia - Tvårbromsning för Celebrex ger Nytt Läge för Pharmacia	JP Morgan Securities Inc.
7/27/01	Pharmacia Corporation - 2Q01 Earnings In-Line with Expectations	Deutsche Bank
7/31/01	Pharmacia Corp. - Pharmacia Corp. Reported Second Quarter EPS of \$0.63, \$0.01 above Our Projection and In Line with Consensus	Banc of America Securities
8/6/01	Pharmacia Corp. - High Expectations met Despite Celebrex Weakness	Morgan Stanley Dean Witter
8/14/01	Earnings Growth Rate Revision - Pharmacia Corporation	PNC Advisors
8/17/01	Pharmacia Corp. - Pharmacia Corp.: July Prescription Data	UBS Warburg
8/17/01	Morning Meeting Note - Script Sense Monthly - Analysis of Forest July 2001 Prescripti ... (Part 2 of 2)	Robertson Stephens
8/22/01	Pharmacia Corporation - JAMA Study Could Pressure Celebrex-Maintain Hold	CIBC World Markets
8/22/01	Pfizer Inc. (PFE), Pharmacia Corporation (PHA), Merck & Co. Inc. (MRK) - JAMA Article Focuses on the Potential Increased Cardio Risk	Deutsche Banc Alex. Brown Inc.
8/22/01	Pfizer Inc. [PFE], Pharmacia Corporation [PHA], Mekch & Co. Inc. [MRK] - Jama Article Focuses on the Potential Increased Cardio Risks of Cox-2's, Further Penetration of Nsaid Market Limited	Deutsche Banc Alex. Brown Inc.
8/22/01	Comment - U.S. Major Pharmaceuticals - Cox-2: Old News still Causing Chest Pain	Merrill Lynch
8/23/01	Pharmacia - Celebrex Faces Stagnating Sales - Valdecocib Risks Delays Next Year	Ohman
8/29/01	Pharmacia Corporation - Diversified Drug Operations Help Manage Recent COX-2 Challenges	Credit Suisse First Boston
8/29/01	Morning Meeting Note - Pharmacia Corporation - PHA: Diversified Drug Operation Help Manage Recent COX-2 Challenges	Credit Suisse First Boston
8/31/01	Pharmacia Corp. - Corporate Technology Information Services,...	Thomson Financial

Exhibit 3



**The FDA Safety Information and
Adverse Event Reporting Program**

Summary Of Safety-Related Drug Labeling Changes Approved By FDA Center for Drug Evaluation and Research (CDER) June 2002

(Posted: 07/30/2002)

How to Find a Safety-Related Labeling Change

Use the drop-down menu to select a product by brand name.

Select a product ...

Additions: Color **green** and underlined: **text addition example**

Deletions: Color **red** and strikethrough: ~~**text deletion example**~~

CELEBREX (celecoxib) Capsules

[June 7, 2002: G.D. Searle]

CLINICAL STUDIES -

Analgesia, including primary dysmenorrhea: In acute analgesic models of post-oral surgery pain, post-orthopedic surgical pain, and primary dysmenorrhea, CELEBREX relieved pain that was rated by patients as moderate to severe. Single doses (see DOSAGE AND ADMINISTRATION) of CELEBREX provided pain relief within 60 minutes.

Use with Aspirin:

Information on the Celecoxib Long-Term Arthritis Safety Study (CLASS), a prospective long-term safety outcome study included. Contact the company for a copy of the label/package insert.

Platelets: In clinical trials, CELEBREX at single doses up to 800 mg and multiple doses of 600 mg BID for up to 7 days duration (higher than recommended therapeutic doses) had no effect on platelet aggregation and bleeding time. Comparators (naproxen 500 mg BID, ibuprofen 800 mg TID, diclofenac 75 mg BID) significantly reduced platelet aggregation and prolonged bleeding time.

Because of its lack of platelet effects, CELEBREX is not a substitute for aspirin for cardiovascular prophylaxis.

WARNINGS

CLASS Study: The estimated cumulative rates at 9 months of *complicated and symptomatic ulcers* (an adverse event similar but not identical to the "upper GI ulcers, gross bleeding or perforation" described in the preceding paragraphs) for patients treated with CELEBREX 400 mg BID (see Special Studies - *Use with Aspirin*) are described in Table 5. Table 5 also displays results for patients less than or greater than or equal to the age of 65 years. The differences in rates between the CELEBREX alone and CELEBREX with ASA groups may be due to the higher risk for GI events in ASA users.

Table 5

Complicated and Symptomatic Ulcer Rates in Patients Taking CELEBREX 400 mg BID (Kaplan-Meier Rates at 9 months [%]) Based on Risk Factors

	<i>Complicated and Symptomatic Ulcer Rates</i>
All Patients	0.78
Celebrex alone (n=3105)	2.19
Celebrex with ASA (n=882)	
Patients < 65 Years	0.47
Celebrex alone (n=2025)	1.26
Celebrex with ASA (n=403)	
Patients ≥65 Years	1.40
Celebrex alone (n=1080)	3.06
Celebrex with ASA (n=479)	

In a small number of patients with a history of ulcer disease, the *complicated and symptomatic ulcer* rates in patients taking CELEBREX alone or CELEBREX with ASA were, respectively, 2.56% (n=243) and 6.85% (n=91) at 48 weeks. These results are to be expected in patients with a prior history of ulcer disease (see WARNINGS- Gastrointestinal (GI) Effects- Risk of GI Ulceration, Bleeding, and Perforation).

PRECAUTIONS

Fluid Retention, Edema, and Hypertension: Fluid retention and edema have been observed in some patients taking CELEBREX (see ADVERSE REACTIONS). In the CLASS study (see Special Studies-Use with Aspirin), the Kaplan-Meier cumulative rates at 9 months of peripheral edema in patients on CELEBREX 400 mg BID (4-fold and 2-fold the recommended OA and RA doses, respectively, and the approved dose for FAP), ibuprofen 800 mg TID and diclofenac 75 mg BID were 4.5%, 6.9% and 4.7%, respectively. The rates of hypertension in the CELEBREX, ibuprofen and diclofenac treated patients were 2.4%, 4.2% and 2.5%, respectively. As with other NSAIDs, CELEBREX should be used with caution in patients with fluid retention, hypertension, or heart failure.

Drug Interactions

Aspirin: CELEBREX can be used with low-dose aspirin. However, concomitant administration of aspirin with CELEBREX increases the ~~may result in an increased~~ rate of GI ulceration or other complications, compared to use of CELEBREX alone (see CLINICAL STUDIES - Special Studies – ~~Gastrointestinal-Use with Aspirin and~~ WARNINGS – Gastrointestinal (GI) Effects – Risk of GI Ulceration, Bleeding, and Perforation – CLASS Study).

Because of its lack of platelet effects, CELEBREX is not a substitute for aspirin for cardiovascular prophylaxis.

Geriatric Use

Of the total number of patients who received CELEBREX in clinical trials, more than 3,300 were 65-74 years of age, while approximately 1,300 additional patients were 75 years and over. No substantial differences in effectiveness were observed between these subjects and younger subjects. In clinical studies comparing renal function as measured by the GFR, BUN and creatinine, and platelet function as measured by bleeding time and platelet aggregation, the results were not different between elderly and young volunteers. However, as with other NSAIDs, including those that selectively inhibit COX-2, there have been more spontaneous post-marketing reports of fatal GI events and acute renal failure in the elderly than in younger patients (see WARNINGS – Gastrointestinal (GI) Effects -Risk of GI Ulceration, Bleeding, and Perforation).

ADVERSE REACTIONS

Safety Data from CLASS Study:

Hematological Events:

During this study (see Special Studies-Use with Aspirin), the incidence of clinically significant decreases in hemoglobin (>2 g/dL) confirmed by repeat testing was lower in patients on CELEBREX 400 mg BID (4-fold and 2-fold the recommended OA and RA doses, respectively, and the approved dose for FAP) compared to patients on either diclofenac 75 mg BID or ibuprofen 800 mg TID: 0.5%, 1.3% and 1.9%, respectively. The lower incidence of events with

CELEBREX was maintained with or without ASA use (see CLINICAL STUDIES- Special Studies- Platelets).

Withdrawals/Serious Adverse Events:

Kaplan-Meier cumulative rates at 9 months for withdrawals due to adverse events for CELEBREX, diclofenac and ibuprofen were 24%, 29%, and 26%, respectively. Rates for serious adverse events (i.e. those causing hospitalization or felt to be life threatening or otherwise medically significant) regardless of causality were not different across treatment groups, respectively, 8%, 7%, and 8%.

Based on Kaplan-Meier cumulative rates for investigator-reported serious cardiovascular thromboembolic adverse events*, there were no differences between the CELEBREX, diclofenac or ibuprofen treatment groups. The rates in all patients at 9 months for CELEBREX, diclofenac and ibuprofen were 1.2%, 1.4%, and 1.1%, respectively. The rates for non-ASA users in each of the three treatment groups were less than 1%. The rates for myocardial infarction in each of the three non-ASA treatment groups were less than 0.2%.

*includes myocardial infarction, pulmonary embolism, deep venous thrombosis, unstable angina, transient ischemic attacks or ischemic cerebrovascular accidents.

Adverse events from analgesia and dysmenorrhea studies: Approximately 1,700 patients were treated with CELEBREX in analgesia and dysmenorrhea studies. All

patients in post-oral surgery pain studies received a single dose of study medication. Doses up to 600 mg/day of CELEBREX were studied in primary dysmenorrhea and post-orthopedic surgery pain studies. The types of adverse events in the analgesia and dysmenorrhea studies were similar to those reported in arthritis studies. The only additional adverse event reported was post-dental extraction alveolar osteitis (dry socket) in the post-oral surgery pain studies.

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Exhibit 4
Summary of Residual Returns
for Pharmacia Corp. Common Stock
4/17/00 – 8/6/01

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
4/17/2000 [†]	\$54.13	5,782,199	1.88%	1.43%	2.34%	-0.43%	-0.22
4/18/2000	\$53.06	4,932,099	-1.96%	2.35%	1.70%	-3.87% *	-1.98
4/19/2000	\$59.75	9,619,099	12.60%	-0.24%	-1.27%	13.87% *	7.15
4/20/2000	\$58.25	7,218,000	-2.51%	0.97%	0.29%	-2.88%	-1.48
4/24/2000	\$58.06	5,731,599	-0.32%	0.43%	1.59%	-1.77%	-0.91
4/25/2000 [†]	\$54.00	7,264,899	-7.00%	2.58%	0.72%	-8.05% *	-4.11
4/26/2000	\$52.75	8,837,599	-2.31%	-0.68%	-1.69%	-0.58%	-0.30
4/27/2000	\$52.50	3,947,599	-0.47%	-0.59%	-0.26%	-0.05%	-0.03
4/28/2000	\$49.94	7,654,101	-4.88%	-0.97%	-0.48%	-4.19% *	-2.16
5/1/2000	\$49.63	7,083,799	-0.63%	1.00%	-0.12%	-0.62%	-0.32
5/2/2000 [†]	\$50.00	5,329,099	0.76%	-0.74%	-0.35%	1.28%	0.66
5/3/2000	\$51.00	4,598,199	2.00%	-2.14%	-1.51%	3.84% *	1.97
5/4/2000	\$52.25	5,897,799	2.45%	-0.07%	0.05%	2.50%	1.29
5/5/2000	\$54.00	4,814,399	3.35%	1.09%	2.17%	1.26%	0.65
5/8/2000	\$55.56	4,452,500	2.89%	0.31%	2.93%	0.26%	0.13
5/9/2000	\$55.56	5,655,399	0.00%	-0.63%	-0.60%	0.74%	0.38
5/10/2000	\$54.13	5,801,199	-2.59%	-1.25%	-1.11%	-1.27%	-0.65
5/11/2000	\$54.38	3,496,399	0.46%	1.36%	-1.09%	1.28%	0.65
5/12/2000	\$53.50	2,908,299	-1.61%	0.94%	0.19%	-1.88%	-0.97
5/15/2000	\$55.19	3,332,899	3.15%	2.01%	1.57%	1.44%	0.74
5/16/2000	\$53.75	2,754,099	-2.60%	0.47%	0.01%	-2.62%	-1.35
5/17/2000	\$52.94	3,043,000	-1.51%	-1.19%	-0.93%	-0.37%	-0.19
5/18/2000	\$52.50	3,359,399	-0.83%	-0.21%	1.24%	-1.84%	-0.95
5/19/2000	\$54.94	3,669,000	4.64%	-1.55%	1.15%	3.97% *	2.03
5/22/2000 [†]	\$53.19	3,192,199	-3.19%	-0.72%	-0.29%	-2.71%	-1.40
5/23/2000 [†]	\$53.50	4,210,000	0.59%	-0.73%	-0.08%	0.87%	0.45
5/24/2000	\$51.81	4,142,500	-3.15%	0.78%	1.09%	-4.21% *	-2.17
5/25/2000	\$52.13	3,535,699	0.60%	-0.85%	-0.54%	1.33%	0.68
5/26/2000	\$51.75	2,479,699	-0.72%	-0.14%	0.01%	-0.63%	-0.32
5/30/2000	\$50.50	2,267,000	-2.42%	1.99%	-0.68%	-2.09%	-1.07
5/31/2000	\$51.94	2,329,199	2.85%	0.35%	-0.33%	3.16%	1.63
6/1/2000	\$51.81	3,032,099	-0.24%	1.22%	-0.14%	-0.27%	-0.14
6/2/2000	\$49.31	4,790,899	-4.83%	1.26%	-3.07%	-2.20%	-1.12
6/5/2000	\$50.00	3,188,299	1.39%	-0.69%	-0.79%	2.31%	1.19
6/6/2000	\$48.94	3,843,299	-2.13%	-0.33%	0.95%	-2.84%	-1.47
6/7/2000	\$50.50	3,185,899	3.19%	0.44%	0.79%	2.47%	1.28
6/8/2000	\$50.13	1,660,699	-0.74%	-0.60%	-0.36%	-0.23%	-0.12
6/9/2000 [†]	\$52.06	2,561,699	3.87%	-0.54%	0.19%	3.87% *	1.99
6/12/2000	\$52.13	2,616,799	0.12%	-0.26%	0.10%	0.15%	0.08
6/13/2000	\$53.13	3,531,199	1.92%	1.06%	2.70%	-0.65%	-0.33

Exhibit 4
Summary of Residual Returns
for Pharmacia Corp. Common Stock
4/17/00 – 8/6/01

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
6/14/2000	\$54.75	3,313,399	3.06%	0.47%	2.09%	1.16%	0.60
6/15/2000	\$55.75	3,407,799	1.83%	0.11%	0.07%	1.82%	0.94
6/16/2000	\$56.06	4,275,699	0.56%	-1.18%	0.50%	0.40%	0.21
6/19/2000	\$56.50	3,241,699	0.78%	0.72%	1.51%	-0.64%	-0.33
6/20/2000	\$56.56	3,541,599	0.11%	-0.78%	-1.23%	1.45%	0.74
6/21/2000	\$55.44	3,573,199	-1.99%	-0.04%	1.65%	-3.40% *	-1.75
6/22/2000	\$51.75	5,667,199	-6.65%	-1.15%	-2.17%	-4.40% *	-2.26
6/23/2000	\$53.06	3,784,299	2.54%	-0.25%	0.42%	2.28%	1.18
6/26/2000	\$53.38	3,396,599	0.59%	0.62%	1.49%	-0.80%	-0.41
6/27/2000	\$53.56	3,731,899	0.35%	-0.04%	1.22%	-0.67%	-0.34
6/28/2000	\$51.81	3,028,099	-3.27%	0.08%	0.06%	-3.26% *	-1.68
6/29/2000	\$50.50	7,798,500	-2.53%	-0.23%	3.98%	-6.02% *	-3.06
6/30/2000	\$51.69	8,765,898	2.59%	0.03%	0.67%	2.06%	1.06
7/3/2000	\$52.88	1,583,699	2.30%	1.13%	0.27%	1.92%	0.99
7/5/2000	\$53.50	3,074,899	1.18%	-0.81%	0.21%	1.22%	0.63
7/6/2000	\$54.13	2,130,399	1.17%	0.13%	-0.58%	1.75%	0.90
7/7/2000	\$54.81	5,106,599	1.27%	1.33%	-0.13%	1.21%	0.62
7/10/2000	\$56.06	4,132,099	2.28%	0.29%	0.89%	1.50%	0.77
7/11/2000	\$57.31	4,020,899	2.23%	0.55%	0.43%	1.82%	0.94
7/12/2000	\$56.69	3,299,799	-1.09%	0.19%	-1.67%	0.46%	0.24
7/13/2000	\$55.56	4,241,599	-1.98%	-0.21%	-3.65%	1.44%	0.73
7/14/2000	\$55.75	3,934,199	0.34%	0.62%	-2.35%	2.43%	1.24
7/17/2000	\$55.75	2,026,799	0.00%	-0.09%	2.07%	-1.78%	-0.92
7/18/2000	\$55.00	2,037,199	-1.35%	-0.75%	-0.80%	-0.40%	-0.21
7/19/2000	\$53.50	3,989,299	-2.73%	-0.19%	-1.12%	-1.60%	-0.82
7/20/2000	\$52.56	4,741,699	-1.75%	0.49%	-1.58%	-0.34%	-0.18
7/21/2000	\$52.00	4,450,000	-1.07%	-0.73%	-0.25%	-0.64%	-0.33
7/24/2000	\$52.50	4,751,099	0.96%	-0.67%	1.52%	-0.21%	-0.11
7/25/2000 [†]	\$55.63	11,599,000	5.95%	0.24%	-0.92%	6.82% *	3.51
7/26/2000	\$55.88	5,709,699	0.45%	-1.19%	-1.01%	1.66%	0.86
7/27/2000	\$55.88	5,811,299	0.00%	0.37%	1.98%	-1.79%	-0.92
7/28/2000	\$55.81	5,220,699	-0.11%	-1.24%	0.93%	-0.65%	-0.33
7/31/2000	\$54.75	3,084,000	-1.90%	0.23%	-1.08%	-0.89%	-0.46
8/1/2000	\$55.75	4,171,599	1.83%	1.14%	2.52%	-0.59%	-0.30
8/2/2000	\$57.56	4,055,799	3.25%	0.36%	1.33%	2.05%	1.06
8/3/2000	\$57.00	7,304,099	-0.98%	0.22%	0.49%	-1.39%	-0.72
8/4/2000	\$56.88	4,803,599	-0.22%	0.93%	-0.90%	0.50%	0.26
8/7/2000	\$57.63	5,488,500	1.32%	0.87%	-0.58%	1.76%	0.91
8/8/2000	\$58.81	7,390,500	2.06%	0.33%	-0.09%	2.16%	1.11
8/9/2000	\$57.56	5,188,899	-2.13%	-0.77%	-5.19%	2.80%	1.41

Exhibit 4
Summary of Residual Returns
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Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
8/10/2000	\$55.75	4,389,500	-3.15%	-0.20%	0.91%	-3.86% *	-1.99
8/11/2000	\$56.19	2,875,899	0.78%	0.83%	0.83%	-0.04%	-0.02
8/14/2000	\$56.13	1,571,299	-0.11%	1.10%	-0.36%	0.09%	0.05
8/15/2000	\$56.81	2,588,199	1.22%	-0.60%	0.14%	1.28%	0.66
8/16/2000	\$57.75	3,075,299	1.65%	-0.26%	0.95%	0.91%	0.47
8/17/2000	\$59.69	4,408,299	3.36%	0.74%	0.25%	3.07%	1.58
8/18/2000	\$58.00	3,603,000	-2.83%	-0.33%	-1.61%	-1.23%	-0.63
8/21/2000	\$57.88	2,489,899	-0.22%	0.33%	1.52%	-1.57%	-0.81
8/22/2000	\$57.31	2,175,399	-0.97%	0.07%	-0.05%	-0.87%	-0.45
8/23/2000	\$57.50	2,690,899	0.33%	0.09%	0.50%	-0.06%	-0.03
8/24/2000	\$58.56	2,845,099	1.85%	-0.04%	0.02%	1.92%	0.99
8/25/2000	\$59.00	2,174,799	0.75%	0.09%	0.08%	0.74%	0.38
8/28/2000	\$58.13	2,199,799	-1.48%	0.41%	-0.47%	-1.06%	-0.55
8/29/2000	\$58.88	3,132,599	1.29%	-0.27%	-1.65%	2.91%	1.50
8/30/2000	\$58.56	2,806,299	-0.53%	-0.44%	-0.14%	-0.24%	-0.12
8/31/2000	\$58.56	3,195,199	0.00%	0.61%	-0.06%	0.01%	0.01
9/1/2000	\$58.38	2,648,899	-0.32%	0.45%	0.67%	-0.93%	-0.48
9/5/2000	\$56.44	4,011,000	-3.32%	-0.20%	-1.82%	-1.56%	-0.80
9/6/2000	\$55.94	3,528,599	-0.89%	-0.26%	-2.38%	1.39%	0.71
9/7/2000	\$56.69	3,376,399	1.34%	0.15%	1.55%	-0.01%	-0.01
9/8/2000	\$54.81	2,849,599	-3.31%	0.04%	0.33%	-3.54% *	-1.83
9/11/2000	\$54.44	2,878,399	-0.68%	0.22%	0.77%	-1.35%	-0.69
9/12/2000	\$54.50	3,009,699	0.11%	-0.21%	1.45%	-1.08%	-0.56
9/13/2000 [†]	\$55.25	4,533,199	1.38%	-0.09%	0.69%	0.84%	0.44
9/14/2000	\$54.75	3,041,699	-0.91%	-0.12%	0.10%	-0.89%	-0.46
9/15/2000	\$54.00	6,498,500	-1.37%	-0.74%	-1.01%	-0.24%	-0.12
9/18/2000 [†]	\$53.00	2,753,899	-1.85%	-1.44%	0.36%	-1.84%	-0.94
9/19/2000	\$53.94	2,146,699	1.77%	0.20%	0.58%	1.29%	0.66
9/20/2000	\$54.31	2,812,000	0.70%	-1.10%	0.22%	0.77%	0.40
9/21/2000	\$56.00	6,654,000	3.11%	0.06%	2.80%	0.64%	0.33
9/22/2000	\$58.94	8,865,599	5.25%	0.78%	3.81%	1.72%	0.88
9/25/2000	\$58.94	5,727,399	0.00%	0.02%	-0.38%	0.42%	0.22
9/26/2000	\$58.00	5,462,799	-1.59%	-0.70%	-1.09%	-0.40%	-0.21
9/27/2000	\$58.44	5,316,099	0.75%	0.19%	0.49%	0.35%	0.18
9/28/2000	\$60.06	9,734,399	2.78%	1.78%	0.78%	1.82%	0.94
9/29/2000	\$60.19	5,099,000	0.21%	-0.71%	0.21%	0.22%	0.12
10/2/2000	\$57.56	4,511,699	-4.36%	0.50%	-0.63%	-3.81% *	-1.96
10/3/2000	\$57.69	3,499,599	0.43%	-0.26%	-0.02%	0.57%	0.29
10/4/2000	\$57.06	3,007,000	-1.08%	0.08%	-0.15%	-0.89%	-0.46
10/5/2000	\$57.50	4,217,199	0.77%	0.41%	1.23%	-0.35%	-0.18

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Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
10/6/2000	\$56.88	4,069,000	-1.09%	-1.76%	-0.39%	-0.33%	-0.17
10/9/2000	\$56.31	2,791,500	-0.99%	-0.39%	-0.79%	-0.12%	-0.06
10/10/2000	\$58.00	7,317,899	3.00%	-0.49%	2.67%	0.75%	0.38
10/11/2000	\$57.81	5,049,899	-0.32%	-1.53%	0.74%	-0.63%	-0.33
10/12/2000	\$57.50	7,451,599	-0.54%	-2.55%	0.72%	-0.64%	-0.33
10/13/2000	\$54.94	8,388,000	-4.46%	2.16%	-0.34%	-4.47% *	-2.29
10/16/2000	\$55.19	4,728,599	0.46%	0.64%	0.90%	-0.41%	-0.21
10/17/2000	\$56.44	4,890,899	2.27%	-1.90%	0.45%	2.28%	1.17
10/18/2000	\$55.00	4,933,599	-2.55%	-0.69%	-1.14%	-1.31%	-0.68
10/19/2000	\$53.56	5,454,799	-2.61%	2.17%	-1.87%	-1.25%	-0.63
10/20/2000	\$50.75	8,127,500	-5.25%	0.55%	-0.18%	-5.11% *	-2.64
10/23/2000	\$53.88	6,452,599	6.16%	0.02%	1.79%	4.61% *	2.37
10/24/2000	\$55.00	4,979,799	2.09%	0.66%	0.05%	1.99%	1.03
10/25/2000	\$56.88	5,221,599	3.41%	-1.55%	1.39%	2.52%	1.29
10/26/2000	\$55.81	6,032,000	-1.87%	-0.47%	-0.36%	-1.38%	-0.71
10/27/2000	\$54.63	4,177,099	-2.13%	1.19%	-0.44%	-1.87%	-0.96
10/30/2000 [†]	\$52.63	11,539,000	-3.66%	2.11%	1.36%	-5.21% *	-2.67
10/31/2000 [†]	\$55.00	8,070,199	4.51%	1.76%	-0.97%	5.14% *	2.63
11/1/2000	\$57.44	5,603,099	4.43%	-0.23%	0.31%	4.27% *	2.20
11/2/2000	\$58.00	5,588,000	0.98%	-0.19%	-0.57%	1.61%	0.83
11/3/2000	\$56.25	4,446,500	-3.02%	-0.28%	-0.42%	-2.51%	-1.30
11/6/2000	\$57.56	3,430,799	2.33%	0.61%	1.18%	1.23%	0.63
11/7/2000	\$57.50	3,826,399	-0.11%	-0.13%	-1.18%	1.06%	0.55
11/8/2000	\$59.44	6,637,299	3.37%	-0.41%	2.05%	1.67%	0.86
11/9/2000	\$59.25	4,484,799	-0.32%	-0.85%	-0.29%	0.18%	0.10
11/10/2000	\$59.25	3,749,399	0.00%	-1.49%	0.92%	-0.48%	-0.24
11/13/2000	\$57.25	3,507,899	-3.38%	-1.14%	-2.91%	-0.45%	-0.23
11/14/2000	\$58.75	3,606,799	2.62%	1.48%	1.68%	0.90%	0.46
11/15/2000	\$58.25	2,386,799	-0.85%	0.40%	0.07%	-0.91%	-0.47
11/16/2000	\$57.00	2,853,199	-2.15%	-0.63%	-0.69%	-1.33%	-0.69
11/17/2000	\$59.81	7,119,599	4.93%	-0.51%	1.06%	4.14% *	2.14
11/20/2000	\$59.50	2,864,699	-0.52%	-1.46%	0.80%	-0.90%	-0.46
11/21/2000	\$59.63	2,743,599	0.21%	0.14%	1.61%	-1.19%	-0.61
11/22/2000	\$58.06	3,336,000	-2.62%	-1.38%	-1.39%	-1.02%	-0.53
11/24/2000	\$57.69	889,900	-0.65%	0.90%	-0.38%	-0.39%	-0.20
11/27/2000	\$59.50	3,540,699	3.14%	0.77%	2.12%	1.16%	0.60
11/28/2000	\$59.25	3,945,000	-0.42%	-0.41%	0.92%	-1.10%	-0.57
11/29/2000	\$60.94	5,749,800	2.85%	0.49%	1.74%	1.26%	0.65
11/30/2000	\$61.00	9,965,398	0.10%	-1.20%	-0.59%	0.94%	0.48
12/1/2000	\$57.50	7,264,700	-5.74%	0.27%	-2.50%	-3.44% *	-1.76

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4/17/00 – 8/6/01

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
12/4/2000	\$59.06	4,419,100	2.72%	0.94%	2.35%	0.49%	0.25
12/5/2000	\$59.75	3,993,000	1.16%	2.49%	-0.56%	1.29%	0.66
12/6/2000	\$57.75	5,372,600	-3.35%	-1.16%	-3.58%	0.19%	0.09
12/7/2000	\$58.00	2,373,200	0.43%	-0.15%	0.37%	0.21%	0.11
12/8/2000	\$59.00	3,680,600	1.72%	1.64%	-0.03%	1.52%	0.78
12/11/2000	\$58.69	2,979,100	-0.53%	0.33%	-0.30%	-0.24%	-0.13
12/12/2000	\$57.81	4,880,500	-1.49%	-0.38%	0.25%	-1.57%	-0.81
12/13/2000	\$58.56	5,442,000	1.30%	-0.26%	2.61%	-0.94%	-0.48
12/14/2000	\$59.31	6,172,700	1.28%	-1.18%	-0.48%	2.01%	1.03
12/15/2000	\$59.63	6,385,500	0.53%	-1.51%	-0.46%	1.30%	0.67
12/18/2000	\$59.38	2,876,400	-0.42%	1.16%	0.92%	-1.39%	-0.72
12/19/2000	\$58.00	3,827,800	-2.32%	-0.52%	0.54%	-2.63%	-1.36
12/20/2000	\$59.94	2,814,700	3.34%	-2.33%	1.23%	2.73%	1.39
12/21/2000	\$58.06	6,079,400	-3.13%	0.69%	-1.57%	-1.76%	-0.91
12/22/2000	\$57.44	3,402,100	-1.08%	1.63%	-0.89%	-0.50%	-0.26
12/26/2000	\$58.63	2,102,900	2.07%	1.02%	1.59%	0.51%	0.26
12/27/2000	\$60.00	6,231,100	2.35%	1.17%	1.12%	1.19%	0.61
12/28/2000	\$60.94	2,514,100	1.56%	0.95%	1.50%	0.11%	0.05
12/29/2000	\$61.00	2,363,600	0.10%	-0.46%	-0.14%	0.39%	0.20
1/2/2001	\$60.00	4,105,100	-1.64%	-2.30%	-1.78%	0.48%	0.25
1/3/2001	\$57.00	6,933,200	-5.00%	2.70%	-3.69%	-2.09%	-1.04
1/4/2001	\$55.31	11,038,100	-2.75%	-1.06%	-3.89%	1.05%	0.53
1/5/2001	\$56.38	5,976,800	1.92%	-1.75%	-0.14%	2.45%	1.26
1/8/2001	\$56.50	4,151,600	0.22%	-0.22%	-0.23%	0.55%	0.28
1/9/2001	\$55.69	4,075,500	-1.44%	-0.06%	1.41%	-2.62%	-1.35
1/10/2001	\$55.50	4,415,200	-0.34%	0.70%	-1.24%	0.73%	0.37
1/11/2001	\$54.94	5,852,800	-1.01%	0.49%	-1.02%	-0.10%	-0.05
1/12/2001	\$55.50	4,405,200	1.02%	-0.32%	0.75%	0.48%	0.25
1/16/2001	\$56.31	3,630,100	1.46%	0.90%	1.88%	-0.33%	-0.17
1/17/2001	\$55.88	3,061,100	-0.78%	-0.33%	-2.22%	1.37%	0.70
1/18/2001	\$56.81	3,596,500	1.68%	0.53%	1.33%	0.45%	0.23
1/19/2001	\$56.25	4,558,500	-0.99%	-0.76%	-1.70%	0.77%	0.40
1/22/2001	\$56.19	3,709,800	-0.11%	0.25%	0.59%	-0.61%	-0.32
1/23/2001	\$55.56	4,311,200	-1.11%	1.08%	0.11%	-1.34%	-0.69
1/24/2001	\$55.38	4,685,400	-0.34%	0.16%	-1.14%	0.74%	0.38
1/25/2001	\$55.50	6,199,700	0.23%	0.32%	1.98%	-1.55%	-0.80
1/26/2001	\$55.81	3,374,100	0.56%	-0.43%	0.06%	0.67%	0.35
1/29/2001	\$55.40	3,325,000	-0.74%	0.41%	-1.60%	0.71%	0.37
1/30/2001	\$55.18	3,597,100	-0.40%	0.91%	0.02%	-0.51%	-0.26
1/31/2001	\$56.02	3,670,100	1.52%	-0.08%	0.30%	1.34%	0.69

Exhibit 4
Summary of Residual Returns
for Pharmacia Corp. Common Stock
4/17/00 – 8/6/01

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
2/1/2001	\$57.08	3,962,200	1.89%	0.44%	1.68%	0.36%	0.19
2/2/2001	\$57.81	3,231,600	1.28%	-0.95%	0.82%	0.79%	0.41
2/5/2001	\$58.28	3,308,400	0.81%	0.51%	-0.08%	0.87%	0.45
2/6/2001 [†]	\$57.65	4,159,500	-1.08%	-0.20%	-0.85%	-0.20%	-0.10
2/7/2001	\$56.13	5,008,600	-2.64%	-0.40%	0.46%	-2.90%	-1.50
2/8/2001	\$53.00	12,338,600	-5.58%	-0.28%	0.16%	-5.59% *	-2.88
2/9/2001	\$54.00	8,808,500	1.89%	-0.68%	0.36%	1.77%	0.91
2/12/2001 [†]	\$54.23	4,268,000	0.43%	1.18%	1.03%	-0.65%	-0.34
2/13/2001	\$51.63	10,655,100	-4.79%	-0.49%	-1.46%	-3.30% *	-1.70
2/14/2001	\$51.90	7,716,600	0.52%	-0.87%	-1.48%	2.10%	1.08
2/15/2001	\$52.02	5,844,100	0.23%	0.37%	-0.16%	0.39%	0.20
2/16/2001	\$51.16	3,813,800	-1.65%	-1.00%	-1.82%	0.26%	0.13
2/20/2001	\$49.95	5,150,600	-2.37%	-1.01%	-0.02%	-2.09%	-1.08
2/21/2001	\$48.85	9,971,500	-2.20%	-1.81%	2.29%	-3.86% *	-1.96
2/22/2001	\$49.25	5,719,300	0.82%	-0.34%	-0.81%	1.69%	0.87
2/23/2001	\$49.05	5,176,600	-0.41%	-0.74%	-0.68%	0.42%	0.22
2/26/2001	\$49.40	5,414,500	0.71%	1.84%	0.73%	-0.22%	-0.11
2/27/2001	\$50.25	7,799,800	1.72%	-0.16%	-0.04%	1.86%	0.96
2/28/2001	\$51.70	5,935,900	2.89%	-1.03%	1.57%	1.74%	0.89
3/1/2001	\$51.97	6,849,300	0.52%	-0.29%	-0.01%	0.66%	0.34
3/2/2001	\$52.79	3,626,700	1.58%	0.28%	0.39%	1.25%	0.65
3/5/2001	\$54.05	4,273,500	2.39%	0.32%	-0.15%	2.54%	1.31
3/6/2001	\$52.85	5,783,400	-2.22%	0.53%	-2.02%	-0.41%	-0.21
3/7/2001	\$51.01	3,820,300	-3.48%	0.56%	-1.93%	-1.77%	-0.91
3/8/2001	\$50.74	4,733,300	-0.53%	0.56%	1.42%	-1.84%	-0.95
3/9/2001	\$51.19	2,698,700	0.89%	-1.61%	0.74%	0.60%	0.31
3/12/2001	\$50.22	3,619,900	-1.89%	-3.66%	-1.84%	0.53%	0.27
3/13/2001	\$49.10	5,754,000	-2.23%	0.56%	-0.44%	-1.86%	-0.96
3/14/2001	\$47.80	5,247,500	-2.65%	-2.56%	-2.90%	0.53%	0.27
3/15/2001	\$47.46	4,981,100	-0.71%	0.86%	0.63%	-1.36%	-0.70
3/16/2001	\$45.18	7,619,200	-4.80%	-1.87%	-2.64%	-1.99%	-1.01
3/19/2001	\$47.16	5,121,400	4.38%	1.45%	1.72%	2.63%	1.35
3/20/2001	\$47.12	4,104,900	-0.08%	-1.62%	-1.29%	1.46%	0.75
3/21/2001	\$46.58	4,898,200	-1.15%	-1.94%	-1.90%	1.01%	0.52
3/22/2001	\$44.00	9,557,500	-5.54%	-1.53%	-0.70%	-4.55% *	-2.34
3/23/2001	\$46.99	8,103,300	6.80%	2.03%	1.66%	4.99% *	2.56
3/26/2001	\$48.28	5,072,200	2.75%	1.58%	1.23%	1.41%	0.73
3/27/2001	\$49.60	5,115,800	2.73%	2.16%	1.50%	1.05%	0.54
3/28/2001	\$49.80	3,598,000	0.40%	-1.61%	1.08%	-0.20%	-0.10
3/29/2001	\$49.87	4,030,700	0.14%	-0.23%	-0.15%	0.40%	0.20

Exhibit 4
Summary of Residual Returns
for Pharmacia Corp. Common Stock
4/17/00 – 8/6/01

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
3/30/2001	\$50.37	3,566,700	1.00%	1.19%	0.61%	0.30%	0.16
4/2/2001	\$49.25	3,026,000	-2.22%	-1.07%	-1.99%	-0.14%	-0.07
4/3/2001	\$48.76	2,918,000	-0.99%	-2.92%	-1.65%	1.12%	0.57
4/4/2001	\$49.23	3,589,500	0.96%	0.11%	1.76%	-0.57%	-0.29
4/5/2001	\$51.04	3,244,000	3.68%	3.46%	2.37%	0.96%	0.49
4/6/2001	\$50.65	3,769,000	-0.53%	-1.61%	-0.36%	0.17%	0.09
4/9/2001	\$52.25	3,376,300	3.16%	0.80%	1.40%	1.82%	0.94
4/10/2001	\$51.20	3,937,400	-2.01%	2.07%	0.10%	-2.41%	-1.24
4/11/2001	\$50.11	4,380,200	-2.13%	-0.81%	-2.43%	0.30%	0.15
4/12/2001	\$50.70	3,141,400	1.18%	1.13%	0.74%	0.37%	0.19
4/16/2001	\$50.45	2,848,300	-0.49%	0.10%	0.70%	-1.07%	-0.55
4/17/2001	\$52.08	3,791,700	3.23%	1.07%	1.93%	1.36%	0.70
4/18/2001	\$50.75	5,343,200	-2.55%	2.83%	-1.09%	-2.02%	-1.02
4/19/2001	\$49.70	7,118,000	-2.07%	0.45%	-1.78%	-0.46%	-0.24
4/20/2001	\$48.55	7,475,300	-2.31%	-0.87%	-0.25%	-1.85%	-0.95
4/23/2001	\$48.50	3,386,700	-0.10%	-0.73%	0.15%	-0.02%	-0.01
4/24/2001	\$48.01	3,410,400	-1.01%	-0.78%	-1.05%	0.16%	0.08
4/25/2001 [†]	\$49.10	4,814,600	2.27%	1.55%	2.32%	-0.05%	-0.02
4/26/2001	\$51.51	4,426,700	4.91%	0.94%	0.99%	3.91% *	2.02
4/27/2001	\$52.25	2,984,600	1.44%	1.32%	0.55%	0.77%	0.39
4/30/2001	\$52.26	3,965,500	0.02%	-0.44%	-0.11%	0.28%	0.14
5/1/2001	\$51.72	4,293,200	-1.03%	0.98%	-0.29%	-0.88%	-0.45
5/2/2001	\$51.00	3,609,900	-1.39%	-0.34%	-0.50%	-0.80%	-0.41
5/3/2001	\$50.00	3,218,800	-1.96%	-1.00%	-0.48%	-1.26%	-0.65
5/4/2001	\$50.00	5,909,100	0.00%	1.21%	1.20%	-1.24%	-0.64
5/7/2001	\$48.95	4,486,100	-2.10%	-0.16%	0.90%	-2.81%	-1.45
5/8/2001	\$48.20	4,003,700	-1.53%	-0.39%	-0.20%	-1.21%	-0.62
5/9/2001	\$47.49	7,355,300	-1.47%	-0.03%	0.17%	-1.55%	-0.80
5/10/2001	\$46.98	6,307,000	-1.07%	0.27%	0.41%	-1.42%	-0.73
5/11/2001	\$46.15	5,216,500	-1.77%	-0.68%	0.07%	-1.63%	-0.84
5/14/2001	\$46.28	5,616,800	0.28%	0.46%	0.31%	0.00%	0.00
5/15/2001	\$45.99	6,999,900	-0.63%	0.14%	0.31%	-0.86%	-0.44
5/16/2001	\$48.38	5,860,000	5.20%	2.40%	3.20%	1.92%	0.98
5/17/2001	\$49.49	6,453,000	2.29%	0.39%	1.00%	1.39%	0.72
5/18/2001	\$49.60	4,609,500	0.22%	0.29%	-1.00%	1.15%	0.59
5/21/2001	\$50.02	4,937,700	0.85%	0.98%	0.86%	-0.03%	-0.02
5/22/2001	\$49.50	4,866,700	-1.04%	-0.33%	-1.09%	0.09%	0.05
5/23/2001	\$48.74	5,012,900	-1.54%	-1.28%	-0.73%	-0.55%	-0.29
5/24/2001	\$48.69	4,140,700	-0.10%	0.01%	-0.22%	0.17%	0.09
5/25/2001	\$48.56	2,923,100	-0.27%	-0.90%	-0.62%	0.54%	0.28

Exhibit 4
Summary of Residual Returns
for Pharmacia Corp. Common Stock
4/17/00 – 8/6/01

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
5/29/2001	\$48.01	5,039,200	-1.13%	-0.31%	0.71%	-1.64%	-0.85
5/30/2001 [†]	\$48.25	3,489,900	0.50%	-1.09%	-0.27%	1.02%	0.53
5/31/2001	\$48.56	3,689,800	0.64%	0.56%	-0.30%	0.89%	0.46
6/1/2001	\$49.35	3,187,800	1.63%	0.18%	1.33%	0.46%	0.24
6/4/2001	\$49.66	1,390,700	0.63%	0.58%	0.60%	0.05%	0.03
6/5/2001	\$49.60	2,973,600	-0.12%	0.85%	1.54%	-1.60%	-0.82
6/6/2001	\$49.35	2,981,800	-0.50%	-1.07%	-1.26%	0.91%	0.47
6/7/2001	\$49.81	2,215,200	0.93%	0.12%	0.18%	0.82%	0.43
6/8/2001	\$49.70	1,902,900	-0.22%	-0.62%	-0.71%	0.62%	0.32
6/11/2001	\$49.06	3,249,600	-1.29%	-0.69%	-1.25%	0.05%	0.03
6/12/2001	\$48.97	2,681,100	-0.18%	-0.05%	0.02%	-0.12%	-0.06
6/13/2001	\$48.75	2,321,000	-0.45%	-0.68%	-0.36%	0.08%	0.04
6/14/2001	\$48.15	2,933,200	-1.23%	-1.38%	0.06%	-0.95%	-0.49
6/15/2001	\$48.80	5,873,000	1.35%	-0.32%	-0.31%	1.77%	0.91
6/18/2001	\$49.19	2,145,100	0.80%	-0.34%	-0.48%	1.37%	0.71
6/19/2001	\$49.51	2,424,300	0.65%	0.15%	-0.37%	1.03%	0.53
6/20/2001	\$50.75	5,422,200	2.50%	0.76%	0.89%	1.64%	0.84
6/21/2001	\$51.50	5,958,600	1.48%	0.89%	0.69%	0.77%	0.40
6/22/2001	\$48.79	8,505,200	-5.26%	-0.90%	-2.77%	-2.51%	-1.28
6/25/2001	\$48.85	5,650,700	0.12%	-0.84%	-0.23%	0.56%	0.29
6/26/2001	\$48.43	4,608,100	-0.86%	-0.21%	-0.40%	-0.38%	-0.20
6/27/2001	\$47.22	4,714,000	-2.50%	-0.46%	-1.68%	-0.82%	-0.42
6/28/2001	\$47.12	6,102,500	-0.21%	0.93%	0.54%	-0.80%	-0.41
6/29/2001	\$45.95	6,675,900	-2.48%	0.01%	-1.29%	-1.24%	-0.64
7/2/2001	\$46.58	4,884,500	1.37%	0.89%	1.58%	-0.14%	-0.07
7/3/2001	\$46.59	1,798,700	0.02%	-0.20%	-0.25%	0.36%	0.19
7/5/2001	\$46.50	2,140,900	-0.19%	-0.82%	-0.78%	0.74%	0.38
7/6/2001	\$46.00	2,736,800	-1.08%	-1.86%	-0.74%	0.01%	0.01
7/9/2001	\$46.81	3,451,300	2.05%	0.42%	1.61%	0.60%	0.31
7/10/2001	\$46.95	3,696,500	0.30%	-0.97%	-0.64%	1.14%	0.59
7/11/2001	\$46.70	4,581,600	-0.53%	-0.45%	0.45%	-0.78%	-0.40
7/12/2001	\$46.22	3,947,400	-1.03%	1.58%	-0.86%	-0.47%	-0.24
7/13/2001	\$46.85	3,385,400	1.36%	0.55%	1.06%	0.38%	0.19
7/16/2001	\$42.84	13,389,600	-8.56%	-0.74%	-0.17%	-8.19% *	-4.23
7/17/2001	\$42.60	8,441,000	-0.56%	0.83%	1.24%	-1.76%	-0.91
7/18/2001	\$43.15	8,254,300	1.29%	-0.18%	2.25%	-0.64%	-0.33
7/19/2001	\$43.35	6,450,200	0.46%	0.31%	0.23%	0.28%	0.14
7/20/2001	\$43.65	3,305,400	0.69%	-0.12%	0.72%	0.14%	0.07
7/23/2001	\$43.41	3,079,400	-0.55%	-1.33%	-1.79%	1.39%	0.72
7/24/2001	\$42.00	5,424,100	-3.25%	-1.70%	-1.42%	-1.57%	-0.81

Exhibit 4 **Summary of Residual Returns** **for Pharmacia Corp. Common Stock** **4/17/00 – 8/6/01**

Source: CRSP; Bloomberg

Date	PHA Stock Price	PHA Volume	PHA Stock Return	NYSE Index Return	Industry Index Return	PHA Residual Return	t-stat
7/25/2001 [†]	\$42.12	5,279,100	0.29%	1.37%	0.45%	-0.30%	-0.15
7/26/2001	\$41.85	7,593,600	-0.64%	0.93%	1.02%	-1.66%	-0.85
7/27/2001	\$42.12	6,397,300	0.65%	0.26%	0.00%	0.68%	0.35
7/30/2001	\$43.28	5,863,100	2.75%	0.05%	0.93%	1.98%	1.02
7/31/2001	\$44.62	7,969,900	3.10%	0.50%	1.65%	1.59%	0.82
8/1/2001	\$44.55	4,041,000	-0.16%	0.03%	-0.19%	0.08%	0.04
8/2/2001	\$43.90	4,655,500	-1.46%	0.20%	-0.11%	-1.32%	-0.68
8/3/2001	\$44.00	4,137,400	0.23%	-0.34%	-0.46%	0.78%	0.40
8/6/2001 ^{†1}	\$44.00	3,648,100	0.00%	-1.00%	-0.77%	0.96%	0.50

Note:

† indicates Complaint day.

¹ Complaint day is Sunday, August 5, 2001.

Pharmacia stock returns are adjusted for dividends.

Residual returns for each company are calculated using a two-factor model, consisting of a market index (NYSE Index) and an industry index.

The Industry Index is an equal-weighted index comprised of the following companies mentioned frequently as comparables in Pharmacia analyst reports, proxy statements and key pharmaceutical indices: Bristol-Myers Squibb Co., Eli Lilly & Co., Schering-Plough Corp., AstraZeneca plc, Glaxosmithkline plc, Abbott Laboratories, Novartis AG, American Home Products Corp. and Johnson & Johnson.

* Residual return is statistically significant using a 95% confidence interval and a one-tailed test.

Exhibit 5
Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

Prior to the trials, the protocol setting forth the criteria for the CLASS study indicated that Celebrex would only be found superior to ibuprofen or diclofenac if it caused statistically significantly fewer ulcer-related complications. After the trials were complete, defendants added symptomatic ulcers to the comparison criteria in order to improve Celebrex's relative performance. Such post-hoc changes to the protocol violated standard scientific practice and misleadingly portrayed Celebrex's GI safety;

¶ 46 (c), Consolidated Complaint, October 27, 2003

Exhibit 5

Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

A summary of the results of the Celebrex Long-Term Arthritis Safety Study (CLASS) was presented Saturday evening (April 15) at the Annual Meeting of the American College of Physicians in Philadelphia. More complete data and analysis will be presented at various medical meetings over the next several months.

...

The primary endpoint of the trial was the incidence of serious gastrointestinal complications after six months of treatment.

- Overall, patients receiving high-dose Celebrex, including patients receiving low-dose aspirin, experienced a 0.77% incidence of serious gastrointestinal complications versus 1.45% of patients treated with comparative NSAIDs ($p=0.09$). This comparison fell 1-2 events short of statistical significance.
- Excluding patients taking low-dose aspirin, Celebrex-treated patients experienced 64% fewer serious GI complications than patients treated with traditional NSAIDs (0.4% versus 1.3%, $p=0.036$).

These findings strongly suggest that low-dose aspirin is a significant independent risk factor for adverse GI events, comparable to standard doses of NSAIDs....

Arnhold & S. Bleichroeder, Inc., April 17, 2000

- On a variety of measures, Celebrex showed clear statistical superiority versus NSAIDs; however, the primary endpoint was a particularly high hurdle, and on this metric Celebrex narrowly missed statistical separation from NSAIDs.

...

It appears that neither the VIGOR study on Merck's Vioxx ... nor this CLASS study on Celebrex is completely void of controversy. ...In our view, the GI superiority of both Celebrex, and Vioxx is the primary issue and should be evident to the FDA. We expect meaningful modification of the standard NSAID GI warning for both products after these data are reviewed. Although there may be some disappointment in the market on Celebrex's failure on the primary endpoint, we do not expect this to be a significant problem and would view any PHA sell-off as a buying opportunity....

...Two endpoints used to measure GI safety were patients with (a) "ulcers *and* complications;" and (b) patients only with the more severe "complications." ...For the endpoint "ulcers and complications" – Celebrex was statistically superior, both in the group

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Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

including background aspirin therapy and when those patients are excluded. However, for the higher hurdle, “complications” only, Celebrex was only statistically superior when the aspirin takers were excluded, narrowly missing statistical significance ($p=0.09$ vs. the required $p=0.05$) among the study’s population. Unfortunately, this was the predefined “primary endpoint” of the trial.

[Note that JPMorgan apparently attended the Fred Silverstein MD’s presentation at the American College of Physicians meeting in Philadelphia on Saturday night, April 15, 2000. The April 17 report has three tables attributed, “Source: Fred Silverstein MD presentation of CLASS Trial Results on 4/15/00.”]

JPMorgan, April 17, 2000

The conclusion is confounded, however, by the fact that the trial did not demonstrate statistically significant superiority of Celebrex in the primary endpoint of ulcer complications; which includes bleeding ulcers, perforations and obstructions. However, on the second endpoint of ulcer complications *plus* symptomatic ulcers, Celebrex was shown to be statistically superior to the NSAIDs.

...

PHA and PFE plan to submit these data to the FDA in hopes of revising (or best case, removing) the standard NSAID warning about GI events that currently appears in the label. A revision of the label is likely to have a positive impact on reimbursement and sales of Celebrex. We are making no change to our forecasts, as we had anticipated the study to corroborate the strong safety profile of the product. We are expecting 2000 sales of \$2.4 billion and 2001 sales of \$3.2 billion....

Morgan Stanley Dean Witter, April 18, 2000

Al Heller:...

Celebrex resulted in 42% fewer symptomatic ulcers and ulcers complications versus the NSAID comparators, a statistically significant difference....

When we focus only the most serious GI events, mainly ulcer complications which include perforations, gastric obstructions and GI bleeds, among all patients including those using low dosage aspirin, Celebrex resulted in 52% fewer ulcer complications, a finding that was just under statistical significance. Among non-aspirin users, the difference was 65%, which was statistically significant.

...

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Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

Steve Geist: I can't speculate on how the FDA will interpret data or assess the appropriateness of the data; however, we did design the study in conjunction with the FDA. We do think that the results do mirror medical practice and clearly demonstrate the GI safety profile of Celebrex in the general population, and, again, at four times the full OA dose.

Pharmacia Conference Call, April 25, 2000, 10:00 AM

“Celebrex failed to meet the primary endpoint...” in its recently released outcomes trial. However, patients on Celebrex did experience significantly fewer gastrointestinal ulcers and ulcer complications, without the thromboembolic events seen with Vioxx. It remains to be seen whether either COX-2 qualifies for safety claims beyond the standard NSAID warnings that currently occupy their respective labels.

Credit Suisse First Boston, April 26, 2000, 2:53 AM

The results of this study showed that Celebrex users not taking aspirin (a known risk factor for ulcers and GI bleeds) had a 65% reduced risk of peptic ulcers, obstructions and bleeds. This result was statistically significant. Of the entire study group (aspirin and non-aspirin users) on Celebrex a 52% reduction in these events was seen – this result was just shy of statistical significance.

...In fact Celebrex resulted in a significantly decreased rate of stroke when compared to ibuprofen. It is also important to stress that the analysis prospectively identified aspirin users as a sub-group. This is important in terms of how the FDA evaluates the data when ruling on a possible addition to the Celebrex label. Pharmacia has indicated that an sNDA based on these results will be filed by the end of the second quarter.

Merrill Lynch, May 4, 2000

On a variety of measures, Celebrex showed clear statistical superiority on GI safety versus NSAIDs; however, the primary endpoint was a particularly high hurdle and, on this metric, Celebrex narrowly missed statistical separation from NSAIDs....

JP Morgan, May 16, 2000

When considering ulcer complications alone, without also including symptomatic ulcers, the incidence among those taking Celebrex was 0.8 percent, versus 1.5 percent for those taking NSAIDs – a positive trend that failed to achieve statistical significance.

Reuters News, May 21, 2000, 8:27 PM

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Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

[F]or Celebrex, there is the failure to obtain statistical significance on the primary endpoint (which in CLASS was POBs). Whether either of these issues proves to be important in negotiations with the FDA, or proves to be a significant detailing point, remains to be seen.

JP Morgan, May 25, 2000, 8:37 AM

OA and RA patients taking four times the recommended OA dose of the drug (800 mg/day) experienced fewer symptomatic gastrointestinal ulcers and ulcer complications than patients taking the other two drugs. The conclusion is confounded, however, by the fact that the trial did not demonstrate statistically significant superiority of Celebrex in the primary endpoint of ulcer complications, which includes bleeding ulcers, perforations and obstructions. However, on the second endpoint of ulcer complications plus symptomatic ulcers, Celebrex was shown to be statistically superior to the NSAIDs.

...

The trial had two endpoints for evaluating the products' safety profile with respect to gastrointestinal events. The primary endpoint was "ulcer complications," which were defined as upper GI perforations, obstructions and GI bleeds. The second endpoint was "ulcer complications and symptomatic ulcers," which is broader in that it includes the events above in addition to symptomatic ulcers. Though the results numerically favored Celebrex for both of these endpoints, the primary endpoint of "ulcer complications" alone fell short of achieving statistical significance.

Morgan Stanley Dean Witter, May 25, 2000

At the DDW last week, Pharmacia presented data from CLASS (Celebrex Long-term Arthritis Safety Study) trial. Although the results fell short of achieving statistical significance in the primary endpoint of "ulcer complications" (defined as perforations, obstructions, and GI bleeding) versus ibuprofen and diclofenac, the data numerically favored Celebrex for both the endpoints. Statistical significance was achieved in the secondary endpoint which combines "ulcer complications" with symptomatic ulcers. More importantly Celebrex showed no increase in thromboembolic or other cardiovascular events.

Morgan Stanley Dean Witter, May 30, 2000

Celebrex growth has been disappointing as Merck's Vioxx continues to gain share and Pharmacia's plan to improve the safety warning on Celebrex's label will be more challenging since the key study in this effort, the CLASS study, failed to reach statistical

Exhibit 5

Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

significance for its primary endpoint. Ultimately, we still believe both Celebrex and Vioxx will get an improved safety section on their respective labels, but it is unlikely that the entire gastrointestinal warning will be removed.

Paine Webber, June 5, 2000

Failure to Prove the Primary Endpoint in the CLASS Trial Creates Some Risk for the Anticipated Label Change for Celebrex

While we think it is unlikely, failure to prove the primary endpoint of statistical separation from the NSAIDS for Celebrex's gastrointestinal (GI) safety may result in no modification of the standard NSAID warning (relative to GI risk) on Celebrex's product label, or a less substantial modification than that enjoyed by Merck's Vioxx. Modification (or removal) of the warning from Celebrex's label is significant as it will permit Pharmacia to meaningfully promote to consumers the most important attribute of the COX-2 inhibitors – i.e., the substantially reduced risk of adverse GI events when compared with NSAIDS. We do not, however, expect Pharmacia to run into trouble here. The CLASS trial offers compelling “proof” based on predefined end points, that the narrow miss of statistical significance was due to clouding of the GI benefit associated with the allowance of background aspirin therapy (for cardiovascular protection).

JP Morgan, June 8, 2000

The results of the CLASS clinical study were complicated by the fact that Celebrex did not hit its primary endpoint of ulcer complications (defined as bleeding ulcers, obstructions, and perforations[]). Celebrex hit its secondary endpoint, which was broader ulcer complications plus symptomatic ulcers, showing statistically significant superiority over NSAIDs evaluated in the study.

Since the CLASS clinical trial was designed to mirror “real-world” use of NSAIDs in a broad osteoarthritis and rheumatoid arthritis patient population, the trial did not exclude about 1,600 patients in the trial (20% of the studied patient population) taking low-dose aspirin. Under subset analysis, Celebrex showed statistically significant benefit over NSAIDs on both primary and secondary endpoints when aspirin users are excluded from the evaluation. More importantly, Celebrex was not implicated in any thromboembolic or other cardiovascular events, such as edema or increased risk of heart attack.

Credit Suisse First Boston, December 5, 2000

The [FDA] reviewers said the [CLASS] study didn't show significantly fewer stomach problems in patients taking Celebrex, known chemically as celecoxib, than in those taking ibuprofen or diclofenac, two older medicines known as non-steroidal anti-inflammatory

Exhibit 5

Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

drugs, or NSAIDs. Only by looking at selected parts of the data – a practice discouraged by the agency – was the company able to show a benefit, the reviewers said.

“Celecoxib did not demonstrate statistical superiority to NSAIDs or either comparator with regards to the primary safety endpoint . . . at any point in the trial although there were trends that favored celecoxib,” wrote James Witter, the FDA medical officer that reviewed the data.

Bloomberg, February 6, 2001, 10:05 AM

- **The FDA’s written review of the Celebrex sNDA seeking modification or elimination of the NSAID class label was issued yesterday [February 6, 2000] (in advance of today’s FDA Advisory Panel Meeting). These reports are more negative than anticipated, raising the possibility of a contentious Advisory Panel review today.**

...

- **Although we have not been expecting the FDA to entirely do away with the NSAID GI warning, we have expected modifications to the label**, including at least a summary of the CLASS trial results, which we believed would be a positive development. Although the ultimate outcome (what the FDA will require in the label) is hard to predict and there is always room for an upside surprise (witness PFE’s Zeldox), the FDA’ review has to raise investor concerns.

...

- **It has been well-known that the CLASS trial, designed to prove a safety advantage for Celebrex, showed a strong trend on the primary endpoint (upper GI complications, also referred to as POBs) that did not achieve statistical significance.** Investors have taken some comfort in additional measures in the trial, in particular, a statistically significant improvement over the NSAID comparators was seen on the secondary endpoint of upper GI events plus gastroduodenal ulcers (also referred to as PUBs) and a statistically significant safety advantage over NSAIDs in the subgroup of patients not taking aspirin (about 80% of the total).

...

- The four main issues raised by the FDA are: **(1) Pharmacia’s analysis of data at only the 26 week time point, rather than the 52 week time point, is unjustified and invalid** (and the data is even less robust at 52 weeks); **(2) in every subgroup at every time point, Celebrex failed to show a statistically significant benefit over doclofenac [sic]** (the benefit reported over NSAIDS

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Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

is due mostly to the benefit over ibuprofen); (3) even in subgroups in which Celebrex appeared statistically significantly superior to ibuprofen, the P values are uninterpretable owing to a failure to adjust for multiple subgroup analyses; and (4) ibuprofen plus aspirin was statistically superior to either Celebrex or diclofenac [*sic*] plus aspirin (and better than ibuprofen alone).

JP Morgan, February 7, 2001, 2:57 PM

Pharmacia's CLASS (Celecoxib Long-term Arthritis Safety Study) trial of 8,000 patients, comparing Celebrex with generic drugs ibuprofen and diclofenac, failed to meet its primary endpoint of a reduced ulcer rate, even though it showed some favorable trends for Celebrex.

One important factor was that any small ulcer benefit from the COX-2 inhibitor was offset in certain patients who swallowed low doses of aspirin to prevent heart attacks.

Dow Jones News Service, February 8, 2001, 1:04 PM

- Based on the inconclusive results of the CLASS trial (in terms of not meeting the primary endpoint), the Advisory Committee recommended that the FDA not relax the current warnings found in the Celebrex label with regard to gastrointestinal side-effects.

What Has Changed?

Today, PHA presented the results of its Celebrex Long-Term Arthritis Safety Study (CLASS) to the Arthritis Advisory Committee of the FDA. The goal of submitting this new data was to improve Celebrex's label with regard to the rate of gastrointestinal complications when compared to NSAIDs. Currently, Celebrex's label includes warnings of gastrointestinal complications that are common to the NSAIDs class.

The primary endpoint of the CLASS study was incidence of ulcer complications (upper GI bleeding, perforation, or gastric outlet obstruction). Celebrex did not demonstrate statistically significant superiority to either the pooled NSAIDs results or the separate results of each comparator (diclofenac or ibuprofen). Based on the fact that the CLASS trial did not meet its primary endpoint, the committee advised the FDA not to lessen the gastrointestinal NSAIDs warning found in Celebrex's label. The committee decided that no clinically meaningful safety advantage has yet been established for Celebrex compared to NSAIDs.

Exhibit 5

Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

Celebrex did demonstrate statistical superiority to the pooled results (ibuprofen plus diclofenac) and to ibuprofen alone, when patients on aspirin (for cardiovascular protection) were excluded or the definition of the endpoints was expanded to include symptomatic ulcers. Despite PHA's presentation on the importance of these findings, the Advisory Committee decided that the primary endpoint, ulcer complications, was clinically more important than the expanded secondary endpoint. The committee pointed out that Celebrex did not show superiority over diclofenac when aspirin users were excluded or the endpoints were expanded. The committee also felt that patients on aspirin should be included in the results since a significant portion of the patient population using Celebrex may be taking aspirin as a platelet aggregation inhibitor.

In the CLASS trial, Celebrex was dosed at 2 times the RA indicated dose of 400mg/day and 4 times the OA indicated dose of 200mg/day. This above-normal dose of Celebrex (800mg/day) was compared to the standard doses of ibuprofen and diclofenac. The Advisory Committee quickly discussed and dismissed this comparison as being immaterial to the overall results of the trial.

Merrill Lynch, February 8, 2001

The CLASS study was a 6-12 month, double-blind study of 8,000 osteoarthritis and rheumatoid arthritis patients comparing Celebrex with older NSAIDs ibuprofen and diclofenac.... However, for the primary endpoint of upper gastrointestinal complications in all patients, the reduced rate of complications in the Celebrex arm had a p-value of 0.09, too high for statistical significance but a "miss" caused by only two complications....

...The FDA Advisory committees reviewing CLASS and VIGOR clearly struggled with what conclusions should be drawn from these studies. Assuming a 10-12 month sNDA review period, we expect the FDA to decide on labeling changes for Celebrex and Vioxx in Q2:2001. Vioxx's label ultimately may reflect superior language in terms of gastrointestinal safety than Celebrex. This may be offset by enhanced discussion of cardiovascular safety, although Celebrex's label also could be enhanced in this regard. Hence, in terms of global safety, physicians may view the drugs as similar.

SG Cowen, March 19, 2001

With regards to the upcoming revised labels for both Vioxx and Celebex [*sic*], although we do not have perfect information, our belief is that Vioxx might receive both a GI safety mention as well as mention of a cardiovascular risk on its revised label. Celebrex, on the other hand, will receive nothing at all since it did not meet its clinical endpoints....

Bear, Stearns & Co., Inc., July 25, 2001, 6:52 AM

Exhibit 5

Excerpts Regarding CLASS Study Endpoint Criteria (Complaint ¶46(c))

The Food and Drug Administration approved revised labeling for Celebrex that affirms the gastrointestinal safety and reaffirms cardiovascular safety of the drug.

In a press release Friday, Pharmacia Corp. (PHA) and Pfizer Inc. (PFE), which sell the drug, said the new label includes data from a study indicating no statistically significant differences between Celebrex and other common treatments such as diclofenac and ibuprofen in the incidence of complicated ulcers.

...

A spokesman from Pharmacia's research and development department on Friday called the revised label a "very good thing for Celebrex" because it indicates a "very low incidence" of serious ulcer complications for the drug as well as "no increased risk" of cardiovascular problems compared with other nonsteroidal anti-inflammatory drugs.

Dow Jones News Service, June 7, 2002, 11:30 AM

The label also now carries the conclusion of a large study, known as the Class trial, which showed Celebrex didn't significantly reduce the risk [of] complicated ulcers compared with older painkillers....

Bloomberg, June 7, 2002, 2:50 PM

Exhibit 6
Changes in Pharmacia Fiscal 2000, 2001, and 2002 EPS Forecasts
Analyst Reports Issued Around Selected Complaint Dates Related to the Presentation of CLASS Study Data [1]

Source: Analyst Reports

Analyst	EPS Forecast for 2000			EPS Forecast for 2001			EPS Forecast for 2002			Date of Report		Days
	Before	After	% Change	Before	After	% Change	Before	After	% Change	Before	After	Between Forecasts
April 17, 2000												
Arnhold and S. Bleichroeder	\$1.60	\$1.60	-	\$2.05	\$2.05	-	\$2.60	\$2.60	-	4/14/00	4/17/00	3
J. P. Morgan	\$1.55	\$1.55	-	\$1.92	\$1.92	-	N/A	N/A	N/A	4/13/00	4/17/00	4
Morgan Stanley	\$1.58	\$1.58	-	\$1.92	\$1.92	-	\$2.32	\$2.32	-	4/4/00	4/18/00	14
April 25, 2000												
ABN Amro	\$1.59	\$1.59	-	\$1.95	\$1.95	-	N/A	N/A	N/A	4/12/00	4/25/00	13
Bear Stearns	\$1.56	\$1.56	-	\$1.92	\$1.92	-	\$2.32	\$2.32	-	4/10/00	4/25/00	15
Danske Securities	\$1.57	\$1.55	(1.27%)	\$1.93	\$1.90	(1.55%)	\$2.36	\$2.32	(1.69%)	4/19/00	4/25/00	6
Salomon Smith Barney	\$1.55	\$1.55	-	\$1.90	\$1.90	-	\$2.30	\$2.30	-	4/12/00	4/25/00	13
SG Cowen	\$1.55	\$1.55	-	\$1.90	\$1.90	-	\$2.30	\$2.30	-	4/3/00	4/25/00	22
Arnhold and S. Bleichroeder	\$1.60	\$1.57	(1.88%)	\$2.05	\$2.00	(2.44%)	\$2.60	\$2.50	(3.85%)	4/17/00	4/26/00	9
Deutsche Banc Alex Brown	[2] \$1.60	\$1.57	(1.88%)	\$1.95	\$1.93	(1.03%)	N/A	N/A	N/A	N/A	4/26/00	N/A
J. P. Morgan	\$1.55	\$1.55	-	\$1.92	\$1.92	-	N/A	N/A	N/A	4/17/00	4/26/00	9
Merrill Lynch	[2] \$1.53	\$1.55	1.31%	N/A	\$1.91	N/A	N/A	\$2.35	N/A	N/A	4/26/00	N/A
Morgan Stanley	\$1.58	\$1.58	-	\$1.92	\$1.92	-	\$2.32	\$2.32	-	4/18/00	4/26/00	8
Paine Webber	\$1.59	\$1.58	(0.63%)	\$1.91	\$1.90	(0.52%)	N/A	N/A	N/A	4/13/00	4/26/00	13
May 22-23, 2000												
Deutsche Banc Alex Brown	\$1.57	\$1.57	-	\$1.93	\$1.93	-	N/A	N/A	N/A	4/26/00	5/23/00	27
CSFB	\$1.55	\$1.55	-	\$1.87	\$1.87	-	\$2.26	N/A	N/A	4/28/00	5/24/00	26
J. P. Morgan	\$1.55	\$1.55	-	\$1.92	\$1.92	-	N/A	N/A	N/A	4/26/00	5/24/00	28
September 13, 2000												
Paine Webber	\$1.57	\$1.57	-	\$1.88	\$1.88	-	N/A	N/A	N/A	9/7/00	9/14/00	7
February 6-8, 2001												
Bear Stearns	\$1.45	\$1.45	-	\$1.75	\$1.75	-	N/A	N/A	N/A	10/31/00	2/7/01	99
J. P. Morgan	\$1.44	\$1.44	-	\$1.80	\$1.78	(1.11%)	N/A	\$2.20	N/A	10/31/00	2/7/01	99
Salomon Smith Barney	\$1.45	\$1.45	-	\$1.75	\$1.75	-	\$2.10	\$2.10	-	10/30/00	2/7/01	100
CIBC	\$1.45	\$1.45	-	\$1.75	\$1.75	-	N/A	\$2.08	N/A	10/31/00	2/8/01	100
CSFB	\$1.44	\$1.44	-	\$1.74	\$1.74	-	N/A	N/A	N/A	1/5/01	2/8/01	34
Merrill Lynch	\$1.44	\$1.44	-	\$1.78	\$1.78	-	N/A	N/A	N/A	1/12/01	2/8/01	27
Enskilda Securities	\$1.56	\$1.44	(7.69%)	\$1.93	\$1.76	(8.81%)	\$2.36	\$2.14	(9.32%)	7/25/00	2/9/01	199
Salomon Smith Barney	\$1.45	\$1.45	-	\$1.75	\$1.75	-	\$2.10	\$2.10	-	2/7/01	2/9/01	2

Note:

[1] Includes reports issued on the event date and the following trading date. If the event date was not a trading date, includes reports from the two subsequent trading dates.

[2] Previous EPS estimates are explicitly given in the report.

Exhibit 7
Public Press 4/14/00 – 4/18/00

Date	Time	Headline	Source
4/14/00	6:38 AM	Boehringer Wins FDA Approval for Arthritis Painkiller Mobic	Bloomberg News
4/14/00	8:16 AM	FDA Approval Means Americans With Osteoarthritis Have a New Option; New to U.S., Medication has Treated Millions of Patients in More Than 100 Countries	Business Wire
4/14/00	8:18 AM	FDA Approval Means Americans With Osteoarthritis Have a New Option	PR Newswire
4/14/00	9:35 AM	Warner-Lambert Declares Regular Quarterly Dividend of 24 Cents	Business Wire
4/14/00	4:13 PM	Boehringer Wins FDA Approval for Arthritis Drug Mobic (Update2)	Bloomberg News
4/14/00	5:20 PM	DEUTSCHE BANK ANUNCIA DIVIDENDO DE WARNER LAMBERT CEDEAR	Company and Economic Releases
4/14/00	5:40 PM	TECHNICAL ANALYSIS BY BOB BROGAN AVAILABLE ON RADIOWALLSTREET	Company and Economic Releases
4/14/00	6:19 PM	On RadioWallStreet.com: Special Edition of Technical Analysis by Bob Brogan	Business Wire
4/14/00	6:32 PM	Pfizer's 1st-Qtr Profit Seen at 25C a share: Earnings Outlook	Bloomberg News
4/14/00		FDA approval means Americans with osteoarthritis have a new option.	Factiva Press Release Service
4/14/00		Pharmacia Corp. - Cox-2 Developments	Arnhold and S. Bleichroeder, Inc.
4/15/00		Celecoxib Improves Quality of Life in Patients with Osteoarthritis.	American Family Physician
4/15/00		FDA gives its OK to arthritis drug	Saturday State Times/Morning Advocate
4/15/00		Lake County Briefs	Chicago Daily Herald
4/17/00	6:16 AM	AOL, Lucent, IBM, Apple Spotlight This Week's WhisperWatch from WhisperNumber.com	PR Newswire
4/17/00	7:36 AM	Pharmacia Corp. Raised to 'Top Pick' at ABN Amro	Bloomberg News
4/17/00	7:45 AM	Idun Pharmaceuticals Acquires Apaf-1 a Key Apoptosis Initiating Gene	PR Newswire
4/17/00	8:12 AM	Pfizer/Pharmacia Arthritis Product Effective In Study	Dow Jones News Service
4/17/00	8:18 AM	New Findings Presented on Celebrex(R) Safety and Tolerability From Long-Term Outcomes Study of 8,000 Arthritis Patients	PR Newswire
4/17/00	8:52 AM	Pharmacia Corp. Raised to 'Buy' at DLJ	Bloomberg News
4/17/00	8:53 AM	RESEARCH ALERT-Pharmacia raised o top pick.	Reuters News
4/17/00	9:49 AM	Insiders: Top Sellers and Buyers for the Week Ending April 14	Bloomberg News
4/17/00	10:04 AM	Pfizer Inc. Added to 'Top Pick' at Banc of America	Bloomberg News
4/17/00	10:40 AM	Pfizer Seeks to Stop Broadcast of Rival's Pet Medication Ads	Bloomberg News
4/17/00	11:18 AM	Pfizer Inc. Reiterated 'Buy' at Sutro	Bloomberg News
4/17/00	11:18 AM	Pharmacia Corp. Reiterated 'Buy' at Sutro	Bloomberg News
4/17/00	11:39 AM	Long-term data shows new arthritis drug safer.	Reuters News
4/17/00	12:19 PM	Pharmacia's, Pfizer's Celebrex Seen Safer Than Some Painkillers	Bloomberg News
4/17/00	12:59 PM	UPDATE 1-Long-term data show new arthritis drug safer.	Reuters News
4/17/00	1:26 PM	New findings on Celebrex(TM) safety and tolerability from long-term outcomes study of 8,000 arthritis patients	Canada NewsWire
4/17/00	1:37 PM	PHA US: New Findings on Celebrex(TM) Safety and Tolerability	Market News Publishing
4/17/00	1:37 PM	Pfizer Inc: New Findings on Celebrex(TM) Safety and Tolerability	Market News Publishing
4/17/00	3:51 PM	Pharmacia-Pfizer Study Underscores Celebrex Safety	Dow Jones News Service
4/17/00	4:19 PM	Charfoos & Christensen Reports Class Action Lawsuit Filed Over Diabetes Drug	PR Newswire
4/17/00	4:32 PM	Pfizer Seeks to Stop Airing of Rival's Pet Drug Ads (Update1)	Bloomberg News
4/17/00	4:51 PM	American Home's 1st-Qtr Profit Seen at 51c: Earnings Outlook	Bloomberg News
4/17/00	4:51 PM	Pharmacia's, Pfizer's Celebrex Drug Found to Be Safer (Update1)	Bloomberg News
4/17/00	5:14 PM	Summit Bancorp's Fargis: Investment Strategy and Picks	Bloomberg News
4/17/00		Patent rights to major drugs at risk.	Chemical & Engineering News
4/17/00		Study supports once-daily dosing of Celebrex.(Brief Article)	Drug Topics
4/17/00		Value `more important' than cost in drug coverage decisions.(Brief Article)	Drug Topics
4/17/00		New findings presented on Celebrex safety and tolerability from long-term outcomes study of 8000 arthritis patients.	Factiva Press Release Service
4/17/00		New findings presented on Celebrex safety and tolerability from long-term outcomes study of 8000 arthritis patients.	Factiva Press Release Service
4/17/00		celecoxib Searle, Pfizer initiates clinical trial for cancer prevention.	R & D Focus Drug News
4/17/00		Celebrex Class Trial Confirms G.I. Safety (with a Slight Wrinkle)-No Cardiovascular Risk	JP Morgan
4/17/00		celecoxib Searle, Pfizer initiates clinical trial for cancer prevention.	R & D Focus Drug News
4/17/00		Value `more important' than cost in drug coverage decisions.(Brief Article)	Drug Topics
4/18/00	12:31 AM	Warner-Lambert Sued in Class-Action Case over Rezulin, AP Says	Bloomberg News
4/18/00	3:34 AM	Swedish shares seen opening up on Wall St rise.	Reuters News
4/18/00	3:51 AM	New Findings Presented on Celebrex(R) Safety and Tolerability From Long-Term Outcomes Study of 8,000 Arthritis Patients	PR Newswire
4/18/00	7:48 AM	Pfizer Inc Reports First Quarter Net Income Growth of 45 Percent And Reported Diluted Earnings Per Share Growth of 48 Percent	PR Newswire
4/18/00	7:51 AM	/FIRST AND FINAL ADD -- NYTU052 Billion -- Pfizer Inc Q & A/	PR Newswire

Date	Time	Headline	Source
4/18/00	8:04 AM	U.S. Equity Preview: Alliant Techsystems, Lattice, Paine Webber	Bloomberg News
4/18/00	8:12 AM	Pfizer's 1st-Qtr Profit Increases to 28 Cents a Share: Insight	Bloomberg News
4/18/00	8:16 AM	Pfizer profits up 33 percent, led by drug pact sales.	Reuters News
4/18/00	8:53 AM	Pfizer's 1st-Qtr Profit Increases 33% on Viagra, Lipitor Sales	Bloomberg News
4/18/00	8:53 AM	UPDATE 1-Pfizer profits jump on drug pact sales.	Reuters News
4/18/00	9:05 AM	U.S. Equity Preview: Avant!, Greg Manning, Juniper Networks	Bloomberg News
4/18/00	9:47 AM	Pfizer's 1st-Qtr Profit Rises 33% on Viagra, Lipitor (Update1)	Bloomberg News
4/18/00	9:48 AM	Pfizer Inc. Raised to 'Strong Buy' at Deutsche Banc AB	Bloomberg News
4/18/00	10:35 AM	J&J, Pfizer 1st-Qtr Profits Beat Estimates on Higher Drug Sales	Bloomberg News
4/18/00	10:41 AM	Pfizer Announces New Senior Leadership Team	PR Newswire
4/18/00	11:52 AM	Pharmacia: FDA OKs Zyvox	Dow Jones News Service
4/18/00	11:53 AM	U.S. FDA approves new Pharmacia antibiotic Zyvox.	Reuters News
4/18/00	12:03 PM	Pharmacia's Zyvox Wins FDA Approval to Treat Resistance Bacteria	Bloomberg News
4/18/00	12:04 PM	FDA Approves ZYVOX(TM) - the First Antibiotic in a Completely New Class in 35 Years; New Treatment Option for a Significant Public Health Challenge	PR Newswire
4/18/00	1:30 PM	U.S. Equity Movers: AudioCodes, Intel, Pfizer, SportsLine.com	Bloomberg News
4/18/00	1:33 PM	U.S. approves world's first entirely new antibiotic in 35 years	Associated Press Newswires
4/18/00	2:09 PM	Americal Securities Analyst to Interview On RadioWallStreet.com	Business Wire
4/18/00	2:38 PM	UPDATE 2-US FDA approves new superbug-fighting antibiotic.	Reuters News
4/18/00	3:12 PM	FDA Approves New Pharmacia Antibiotic For Stubborn Infections	Dow Jones Business News
4/18/00	3:16 PM	Pfizer's 1st-Qtr Profit Rises 33% on Viagra, Lipitor (Update 2)	Bloomberg News
4/18/00	3:23 PM	PHA US: US Approves ZYVOX(TM)	Market News Publishing
4/18/00	3:35 PM	Pfizer Teleconf.: 1st-Qtr Profit, Warner-Lambert Merger	Bloomberg News
4/18/00	3:41 PM	U.S. approves world's first entirely new antibiotic in 35 years	Associated Press Newswires
4/18/00	4:05 PM	J&J, Pfizer Profits Exceed Estimates; Shares Rise (Update 4)	Bloomberg News
4/18/00	4:19 PM	Pfizer's 1st-Qtr Profit Rises 33% on Viagra, Lipitor (Update 3)	Bloomberg News
4/18/00	4:24 PM	Pharmacia's Zyvox Antibiotic Wins U.S. FDA Approval (Update 2)	Bloomberg News
4/18/00	4:33 PM	UPDATE 3-US FDA approves new superbug-fighting antibiotic.	Reuters News
4/18/00	5:41 PM	U.S. Equity Movers Final: Compaq, Kroll-O'Gara, Plug Power	Bloomberg News
4/18/00	6:13 PM	Pfizer's Cardura Less Effective for Heart Ills Than Older Drug	Bloomberg News
4/18/00	6:17 PM	J&J Doesn't Open 1st-Qtr Call to Public; Pfizer Puts Its on Web	Bloomberg News
4/18/00		Celebrex safer than thought, conference told Arthritis drug said to cause fewer side-effects	The Globe and Mail
4/18/00		Inhibitor-class painkillers 'just basically safer'	USA Today
4/18/00		Impotence Is Given Another Name, and a Drug Market Grows	The New York Times
4/18/00		FDA APPROVES NEW ANTIBIOTIC	Chicago Tribune
4/18/00		Pharmacia Corp. - Positive Results of Celebrex Class Trial Released	Morgan Stanley Dean Witter

Exhibit 8
Public Press 5/19/00 – 5/24/00

Date	Time	Headline	Source
5/19/00	3:57 AM	Swedish shares open down, Ericsson down after U.S.	Reuters News
5/19/00	4:06 AM	Western Australia Bans Genetically Modified Crops for Two Years	Bloomberg News
5/19/00	8:28 AM	SPH FINANCE TOP PICK OF THE MONTH IS PFIZER, TARGET PRICE \$52	Company and Economic Releases
5/19/00	9:41 AM	Medicare May Cut Prices Its Pays for Some Prescription Drugs	Bloomberg News
5/19/00	10:12 AM	Pfizer Inc. Rated 'Strong Buy' at SPH Finance	Bloomberg News
5/19/00	12:14 PM	Leading Rezulin Attorney Urges FDA to Revamp Drug Reporting Process	PR Newswire
5/19/00	4:12 PM	Warner-Lambert's Rezulin Pulled as Safer Drugs Appear, FDA Says	Bloomberg News
5/19/00	5:25 PM	Deutsche Finds Demand for Rare Second-Lien Loan to NutraSweet	Bloomberg News
5/19/00	5:50 PM	Delta & Pine Land Named As Defendant In Antitrust Suit	Dow Jones News Service
5/19/00	6:38 PM	Delta & Pine Land A Defendant In Antitrust Lawsuit Against Monsanto	Dow Jones Business News
5/20/00	12:15 PM	\$1 Million ELLENCE Research Fund(TM) Established to Support Innovative Breast Cancer Research	PR Newswire
5/20/00	12:25 PM	\$1 Million ELLENCE Research Fund(TM) Established to Support Innovative Breast Cancer Research	PR Newswire
5/21/00	5:01 AM	Pfizer Expected to Win EU Approval To Buy Warner-Lambert Monday	Bloomberg News
5/21/00	3:40 PM	Newsweek: Cover: 'The Science of Women's Sexuality'	PR Newswire
5/21/00	5:41 PM	Pfizer Reports Disappointing Female Viagra Trial, Newsweek Says	Bloomberg News
5/21/00	8:27 PM	Vioxx, Celebrex aim to profit from improved safety labels.	Reuters News
5/21/00		Strong work ethic Like many Michiana families, a couple struggles to hold down tough jobs--yet still just inches ahead; THE PRICES OF NEED: A LIVING WAGE	South Bend Tribune
5/22/00	2:33 AM	Cambridge Antibody 1st-Half Loss Narrows on Drug Partnerships	Bloomberg News
5/22/00	8:17 AM	\$1 Million ELLENCE Research Fund(TM) Established to Support Innovative Breast Cancer Research	PR Newswire
5/22/00	11:11 AM	Bank of America's Zimmerman, Levy's Harkins on Stocks	Bloomberg News
5/22/00	11:22 AM	Pharmacia: AROMASIN Extends Patient Time Free Of Tumors	Dow Jones News Service
5/22/00	11:24 AM	Allergy Sufferers May Now Get Allergy Information Based on Individual Needs - Zyrtec(R) (cetirizine HC1) Web Site Relaunched to Address Allergy Sufferer's Individuality	PR Newswire
5/22/00	11:36 AM	Preliminary Data Show Longer Time to Tumor Progression with AROMASIN(R) Versus Tamoxifen in Advanced Breast Cancer	PR Newswire
5/22/00	12:17 PM	Cambridge Antibody 1st-Half Loss Narrows on Alliances (Update2)	Bloomberg News
5/22/00	1:01 PM	Pharmacia's Camptosar, Cisplatin Boost Lung Cancer Survival	Dow Jones News Service
5/22/00	1:15 PM	CAMPTOSAR(R) Plus Cisplatin Shown to Increase Survival in Small-Cell Lung Cancer Study	PR Newswire
5/22/00	1:46 PM	European Commission Clears Pfizer Merger with Warner-Lambert	PR Newswire
5/22/00	3:19 PM	Pharmacia's Camptosar Seen Effective Against Rare Lung Cancer	Bloomberg News
5/22/00	3:36 PM	SEC Filing: Pharmacia filed its Proxy Statement for the period ended 6/23/00.	Disclosure
5/22/00	3:45 PM	Lung Cancer Patients Live Longer On Pharmacia Drug	Dow Jones News Service
5/22/00	4:04 PM	Pharmacia's Camptosar Seen Potent in Rare Lung Cancer (Update1)	Bloomberg News
5/22/00	4:08 PM	Pharmacia Will Double U.S. Cancer-Drug Sales Force (Correct)	Bloomberg News
5/22/00	4:46 PM	Volcker Heads Panel to Oversee Global Accounting Standards	Bloomberg News
5/22/00	4:46 PM	Pharmacia Will Double U.S. Cancer-Drug Sales Force (Update1)	Bloomberg News
5/22/00	4:51 PM	Novartis Cancer Drug May Help Fight Acute Leukemia, Study Says	Bloomberg News
5/22/00	4:56 PM	Pharmacia CEO had \$14 million compensation in 1999.	Reuters News
5/22/00	5:45 PM	Cancer Researchers Sandler and Saijo: Camptosar Trials	Bloomberg News
5/22/00	6:12 PM	Pharmacia's Aromasin Cancer Drug Promising In Early Data	Dow Jones News Service
5/22/00	6:16 PM	Pfizer Signs Second Contract with MICRO, Inc. to Conduct Neuroimaging Study	PR Newswire
5/22/00	8:48 PM	Pfizer May Not Have to Pay Damages to Trovan, Reuters Reports	Bloomberg News
5/22/00		Granny goes north	National Review
5/22/00		Warner-Lambert Co - Doc Re Form 10-Q	RNS Newswire
5/23/00	12:01 AM	Pharmacia says Celebrex shown safer than older drugs.	Reuters News
5/23/00	4:06 AM	DuPont's Holliday on Strategy, Gene-Altered Foods: Comment	Bloomberg News
5/23/00	6:05 AM	Pfizer Gets EU Approval to Buy Warner-Lambert, to Shed Assets	Bloomberg News
5/23/00	6:25 AM	Net Insight Strengthens Its Top Management	Business Wire
5/23/00	6:30 AM	Commission approves merger between Pfizer and Warner-Lambert subject to commitments	European Commission
5/23/00	6:44 AM	Stockholm shares rebound after thrashing.	Reuters News
5/23/00	6:45 AM	Onyx Pharmaceuticals Receives Research Milestone on Development of Armed Anticancer Virus	PR Newswire
5/23/00	7:15 AM	Preliminary Results Show Potential of Novel Angiogenesis Signaling Inhibitor SU5416 to Inhibit Growth and Spread of Colorectal Cancer	PR Newswire
5/23/00	7:16 AM	Pharmacia Drug May Inhibit Growth Of Colorectal Cancer	Dow Jones News Service

Date	Time	Headline	Source
5/23/00	8:16 AM	Findings from Celebrex(R) Safety Study Show Traditional NSAID Comparators Can Cause Serious GI Complications Within First Few Days of Treatment	PR Newswire
5/23/00	8:20 AM	Pfizer Gets EU Approval to Purchase Warner-Lambert (Update1)	Bloomberg News
5/23/00	8:36 AM	Pfizer's Celebrex Well-Tolerated In Study	Dow Jones News Service
5/23/00	9:09 AM	European Union Calendar of Pending Merger Cases, Latest Rulings	Bloomberg News
5/23/00	9:18 AM	Pharmacia Experimental Cancer Drug Safe, Effective, Study Says	Bloomberg News
5/23/00	10:47 AM	UCLA's Rosen: Trial of Pharmacia Angiogenesis Inhibitor	Bloomberg News
5/23/00	11:07 AM	Court Rules in Favor of Pfizer in Trovan Trademark Suit	PR Newswire
5/23/00	11:19 AM	CAMPTOSAR(R) Plus Cisplatin Shown to Increase Survival in Small-Cell Lung Cancer Study	PR Newswire
5/23/00	11:33 AM	Merck, Schering-Plough Team Up on Heart, Asthma Drugs (Update1)	Business News
5/23/00	1:00 PM	ON24 Audio Investor Alert: Analyst: EU Approval of Pfizer/Warner Lambert Merger is No Surprise, No Threat to Merk	Business Wire
5/23/00	1:32 PM	PR Newswire California Summary, Tuesday, May 23, 2000 up to 10:00 a.m. PT	PR Newswire
5/23/00	1:34 PM	Paradigm Medical Renews Alliance With Pharmacia >PMED PHA	Dow Jones News Service
5/23/00	1:37 PM	Pfizer Says Court Throws Out \$143 Mln Verdict in Trovan Dispute	Bloomberg News
5/23/00	2:18 PM	Paradigm Medical Renews Strategic Alliance With Pharmacia Corporation	Business Wire
5/23/00	2:33 PM	Merck, Schering-Plough Team Up on Heart, Asthma Drugs (Update2)	Bloomberg News
5/23/00	3:05 PM	Bristol-Myers, Novartis, Pfizer Work on New Schizophrenia Pills	Bloomberg News
5/23/00	3:54 PM	SANFORD C. BERNSTEIN'S RICHARD EVANS SPEAKS ON RADIOWALLSTREET	Company and Economic Releases
5/23/00	4:09 PM	Pharmacia Cancer Drug Shows Promise in Early Study (Update1)	Bloomberg News
5/23/00	4:10 PM	Sanford C. Bernstein Analyst Interviews On RadioWallStreet.com	Business Wire
5/23/00	4:48 PM	Pfizer Says Court Throw Out \$143 Mln Trovan Verdict (Update1)	Bloomberg News
5/23/00	5:35 PM	Merck, Schering-Plough Team Up on Heart, Asthma Drugs (Update4)	Bloomberg News
5/23/00	5:52 PM	AstraZeneca, Novartis, Pharmacia Work on Targeted Cancer Drugs	Bloomberg News
5/23/00		Canada's prescription to prevent drug research	National Post
5/23/00		Findings from Celebrex safety study show traditional NSAID comparators can cause serious GI complications within first few days of treatment.	Factiva Press Release Service
5/23/00		Pfizer Inc. [PFE], Pharmacia Corporation [PHA], Merck & Co. [MRK] - Positive Class Results Could Support Celebrex Label Change--Waiting for Vioxx	Deutsche Banc Alex. Brown
5/23/00		Findings from Celebrex safety study show traditional NSAID comparators can cause serious GI complications within first few days of treatment.	Factiva Press Release Service
5/23/00		Findings from Celebrex safety study show traditional NSAID comparators can cause serious GI complications within first few days of treatment.	Factiva Press Release Service
5/23/00		Pay Package At Pharmacia	The New York Times
5/23/00		PAY PACKAGE AT PHARMACIA	New York Times Abstracts
5/24/00	6:40 AM	Swedish shares stay 3.5 pct down ahead of Wall St.	Reuters News
5/24/00	8:16 AM	The 'Women Who Roared' Take on Menopause - Study Finds 5 'Mindsets' Driving Need for Individualized Management	PR Newswire
5/24/00	9:24 AM	Hot Stocks To Watch: LTV PHA MSTR	Dow Jones News Service
5/24/00	10:47 AM	On RadioWallStreet.com: Technical Analysis by Bob Brogan	Business Wire
5/24/00	11:51 AM	Live Call-in Show: Major Buying Opportunity? Bob Brogan Thinks So	Business Wire
5/24/00	12:00 PM	Mobile Cholesterol Unit to Offer Free Screenings at Area Wal-Marts	PR Newswire
5/24/00	1:35 PM	Gastrointestinal Effects of Searle's Parecoxib Sodium Similar to Placebo	PR Newswire
5/24/00	2:01 PM	Pharmacia Corp: Parecoxib Sodium 'Superior' To Ketorolac	Dow Jones News Service
5/24/00	5:57 PM	Safety Data May Not Affect Who Leads Arthritis Market	Dow Jones News Service
5/24/00		Celebrex launched in the UK.	Factiva Press Release Service
5/24/00		AM Call: PHA: Burgeoning Oncology Franchise Adds Product Diversity	Credit Suisse First Boston Morning Meeting Notes

Exhibit 9
Public Press 9/12/00 – 9/14/00

Date	Time	Headline	Source
9/12/00	3:31 AM	Biosearch 1st-Half Year Pretax 25 Lire-Share (Table)	Bloomberg News
9/12/00	3:37 AM	Biosearch Italia 1st-Half Sales Rise 8 Percent to 13 Bln Lire	Bloomberg News
9/12/00	6:15 AM	Insiders Sell PHARMACIA CORP. Stock	Federal Filings Newswires
9/12/00	7:52 AM	Swedish shares flat at midsession, Hennes perks up.	Reuters News
9/12/00	9:00 AM	Interneuron Announces initiation of Clinical Testing of Pagoclone by Pfizer; Interneuron to Receive Milestone Payment	Business Wire
9/12/00	4:00 PM	Good News for People With Arthritis	PR Newswire
9/12/00	4:00 PM	JAMA Study Shows Arthritis Medication Causes Fewer Gastrointestinal Problems than Traditional Drugs	PR Newswire
9/12/00	4:02 PM	Arthritis drug produces fewer stomach problems-study.	Reuters News
9/12/00	4:08 PM	Good News for People With Arthritis	PR Newswire
9/12/00	4:18 PM	Pharmacia's Celebrex Gets Marketing Tool With JAMA Article	Bloomberg News
9/12/00	5:27 PM	U.S. Equity Movers Final: NetCreations, PRI Automation, Wavo	Bloomberg News
9/12/00	11:45 PM	Gastrointestinal Benefit Cited for Arthritis Drug Celebrex	Dow Jones Business News
9/12/00		COX-2 Inhibitors Suppress Prostate Cancer Spread.	Cancer Weekly
9/12/00		Feel better fast	Woman's Day
9/12/00		JAMA study shows arthritis medication causes fewer gastrointestinal problems than traditional drugs.	Factiva Press Release Service
9/12/00		JAMA study shows arthritis medication causes fewer gastrointestinal problems than traditional drugs.	Factiva Press Release Service
9/12/00		Pharmacia to Add Offices in New Jersey	The New York Times
9/12/00		METRO BUSINESS: PHARMACIA TO ADD OFFICES IN NEW JERSEY	New York Times Abstracts
9/12/00		Pharmacia Executive Reaped \$23.7 Million By Exercising Options	The Wall Street Journal
9/13/00	4:27 AM	Pharmacia says study finds Celebrex safer.	Reuters News
9/13/00	8:15 AM	JAMA Study Shows Arthritis Medication Causes Fewer Gastrointestinal Problems than Traditional Drugs	PR Newswire
9/13/00	8:17 AM	Compugen Completes Milestone in Multi-Year Pfizer Agreement	Business Wire
9/13/00	8:32 AM	OSI Pharmaceuticals, Inc. Announces Presentation of Early Phase II Data for OSI-774 at International Lung Cancer Conference in Japan	PR Newswire
9/13/00	10:39 AM	EU Scientists Say Italian Ban on Some GMO Foods Isn't Justified	Bloomberg News
9/13/00	11:05 AM	Pfizer Closer to FDA Approval for Schizophrenia Drug (Correct)	Bloomberg News
9/13/00	11:48 AM	TissuelInformatics.Inc(TM) Strengthens Position for Rapid Growth, Announces New Business Development Leader, Informatics Specialist, Human Resources Director	PR Newswire
9/13/00	12:46 PM	Ahhhh-Choo!!! Is It a Cold or Allergy? Find Out How to Tell the Difference During the Fall Allergy Season	PR Newswire
9/13/00	3:54 PM	Companies to Spend \$50 Mln in 2001 to Promote Engineered Foods	Bloomberg News
9/13/00	4:05 PM	Daily Update -- AHP to Pay Females with Bad Norplant Contraceptives	Dow Jones Business News
9/13/00	5:19 PM	Maxygen Announces Follow-On Bioprocess Collaboration With Pfizer And Advancement of Product Candidate	PR Newswire
9/13/00		Arthritis Drug Curbs Side-Effect	Newsday
9/13/00		DTC ad spending projected to top \$2 billion in 2000.(Brief Article)	Drug Store News
9/13/00		Gastrointestinal Benefit Cited for Celebrex	The Wall Street Journal
9/13/00		Monsanto Executives Cash In on Pharmacia Merger	Missouri
9/14/00	6:16 AM	Ahhhh-Choo!!! Is It a Cold or Allergy? Find Out How to Tell the Difference During the Fall Allergy Season	PR Newswire
9/14/00	8:07 AM	Landmark Study on Lipodystrophy Demonstrates Evolving Perception Physicians Who Treat People Living With HIV	CNW Group
9/14/00	8:17 AM	Landmark Study on Lipodystrophy Demonstrates Evolving Perceptions By Physicians Who Treat People Living With HIV	PR Newswire
9/14/00	8:18 AM	Cold-Like Symptoms Have Many Americans Guessing; Nearly Two-Thirds of Americans Consider a Cause Other Than a Cold Virus For Their Nasal Symptoms, Survey Shows	Business Wire
9/14/00	8:58 AM	PFE US: Landmark Study on Lipodystrophy Demonstrates Evolvin	Market News Publishing
9/14/00	9:50 AM	ADVISORY/Cold-Like Symptoms Have Many American Guessing	Business Wire
9/14/00	11:11 AM	Clinical Trial Results Show Single-Dose Zithromax(R) as Effective as 10 Days of Augmentin(R) in Treating Children's Ear Infections	PR Newswire
9/14/00	11:29 AM	RadioWallStreet.com Talks to Liberty-Stein Roe Manager Eric Gustafson	Business Wire
9/14/00	12:09 PM	Chicago Area Companies Slate Biotech Trade Mission To Paris	Dow Jones News Service
9/14/00	12:35 PM	Nycomed Plans to Expand Product Line to Compete With PE	Bloomberg News
9/14/00	3:30 PM	Ahhhh-Choo!!! Is It a Cold or Allergy? Find Out How to Tell the Difference During the Fall Allergy Season	PR Newswire
9/14/00	5:19 PM	New ACR Guidelines for Osteoarthritis Include Cox-2 Inhibitors for First Time - Important News for the 21 Million Americans Affected by Condition -	PR Newswire
9/14/00		ARTHRITIS DRUG EASIER ON STOMACH IN TRIALS	The Columbus Dispatch
9/14/00		Technology Journal: Celebrex Is Found To Have Caused Fewer Ulcers --- Pharmacia Hopes to Tout Drug's Advantages on Label	The Wall Street Journal Europe
9/14/00		Pharmacia Corp. - Pharmacia Corp.: August Prescription Data	Paine Webber

Exhibit 10
Public Press 2/5/01 – 2/7/01

Date	Time	Headline	Source
2/5/01	2:29 AM	New U.S. HIV Guidelines Caution Against Early Drug Treatment	Bloomberg News
2/5/01	8:01 AM	Health Products Research Announces Results of Metropolitan Area Promotional Audit	PR Newswire
2/5/01	8:54 AM	Physicians Choose Single Protease Inhibitor As Therapy - HIV Resistance Survey Shows Majority Of Physicians Choose Single Protease Inhibitor As First-Line Combination Therapy	Market Wire
2/5/01	10:55 AM	Avatar Associates' White: January Effect & Stock Picks	Bloomberg News
2/5/01	11:02 AM	Avatar Associates' Charles White (Transcript of Interview)	Bloomberg News
2/5/01	11:22 AM	DuPont's Sustiva Found More Effective in HIV Drug Combination	Bloomberg News
2/5/01	12:25 PM	HIV Resistance Survey Shows Majority of Physicians Choose Single Protease Inhibitor as First-Line Combination Therapy	PR Newswire
2/5/01	12:27 PM	HIV Resistance Survey Shows Majority of Physicians Choose Single Protease Inhibitor as First-Line Combination Therapy	CNW Group
2/5/01	12:50 PM	PFE US: HIV Resistance Survey Shows Majority of Physicians	Market News Publishing
2/5/01	1:07 PM	HIV Resistance Survey Shows Choice of Majority of Physicians - HIV Resistance Survey Shows Majority of Physicians Choose Single Protease Inhibitor As First-Line Combination Therapy	Market Wire
2/5/01	1:56 PM	HIV Resistance Survey Shows Choice of Majority of Physicians - HIV Resistance Survey Shows Majority of Physicians Choose Single Protease Inhibitor As First-Line Combination Therapy	Market Wire
2/5/01	3:48 PM	Trimeris, Bristol-Myers Lead New Drug Lineup at Conference	Bloomberg News
2/5/01	4:00 PM	Drug Companies Sued Over Medicines With Phenylpropanolamine	Bloomberg News
2/5/01	4:12 PM	DuPont's Drug Seen More Effective in HIV Drug Combo (Update1)	Bloomberg News
2/5/01	4:26 PM	Pfizer Wins FDA Approval to Sell Ziprasidone Schizophrenia Drug	Bloomberg News
2/5/01	4:29 PM	Harris Bretall's Kurtz: Biotechnology Sector Outlook	Bloomberg News
2/5/01	4:39 PM	Survey Shows Physicians Choose Single Protease Inhibitor As First-Line Combination Therapy	Market Wire
2/5/01	4:48 PM	Drug Companies Sued Over Products Containing PPN (Update1)	Bloomberg News
2/5/01	4:56 PM	Physicians Choose Single Protease Inhibitor As Therapy HIV Resistance Survey Shows Majority Of Physicians Choose Single Protease Inhibitor As First-Line Combination Therapy	Market Wire
2/5/01	5:01 PM	Physicians Choose Single Protease Inhibitor As Therapy HIV Resistance Survey Shows Majority Of Physicians Choose Single Protease Inhibitor As First-Line Combination Therapy	Market Wire
2/5/01	5:13 PM	Pfizer Wins FDA Approval to Sell Schizophrenia Drug (Update1)	Bloomberg News
2/5/01	6:11 PM	U.S. Equity Preview: Computer Sciences, Razorfish, TriQuint	Bloomberg News
2/5/01	6:13 PM	FDA Approves Pfizer Schizophrenia Medicine Ziprasidone	PR Newswire
2/5/01	6:30 PM	Banc of America's Yaffe: FDA Approval of Pfizer Drug	Bloomberg News
2/5/01	6:50 PM	State Street's Borzilleri on Pfizer Schizophrenia Drug: Voices	Bloomberg News
2/5/01	7:06 PM	Editorial in U.S. Journal Skeptical of Inhaled Insulin Benefits	Bloomberg News
2/5/01	7:12 PM	Pfizer's Romano: FDA Approval of Schizophrenia Drug	Bloomberg News
2/5/01	7:18 PM	Eli Lilly's Breier: FDA Approval of Sale of Pfizer Drug	Bloomberg News
2/5/01		Merck & Co gets US approval for new antifungal agent Cancidas.	Marketletter
2/5/01		Pharmacia Corp. - Celebrex in Focus	Handelsbanken/ Investment Banking
2/6/01	4:01 AM	InSite Vision Letter to Stockholders Filed On Form 8-K and Available On Company Website	Business Wire
2/6/01	5:35 AM	Lilly Shares Fall as Pfizer Wins U.S. Approval for Rival Drug	Bloomberg News
2/6/01	5:49 AM	ADVISORY/FDA Approves Pfizer Schizophrenia Medicine Ziprasidone	Business Wire
2/6/01	7:01 AM	U.S. Food & Drug Administration Approves New Pfizer Drug for Schizophrenia	PR Newswire
2/6/01	7:03 AM	FDA Approves Pfizer Schizophrenia Medicine Ziprasidone	PR Newswire
2/6/01	7:31 AM	Deltagen, Inc. Reports Fourth Quarter Results	PR Newswire
2/6/01	10:00 AM	Robertson Stephens Daily Growth Stock Update On SEPR AFFX AZA CBIS JDEC AGEN LLY OSI PFE RAZF XOXO	PR Newswire
2/6/01	10:05 AM	Pharmacia Hasn't Shown Celebrex Safety Benefit, FDA Review Says	Bloomberg News
2/6/01	10:16 AM	Dollar Strength, Yen Strength, and Gold By Jude Wanniski	Polyconomics, Inc.
2/6/01	10:59 AM	Lilly Looks to Heartburn Drug to Fend Off Zyprexa's Competition	Bloomberg News
2/6/01	11:00 AM	NeuroInvestment Reviews Drugs For Bipolar Disorder	Market Wire
2/6/01	12:16 PM	LEHMAN BROTHERS HOLDING ANNUAL GLOBAL HEALTHCARE CONFERENCE	Company and Economic Releases
2/6/01	12:30 PM	Pharmacia's Xalatan Becomes the Number-One Selling Glaucoma Treatment in Japan	PR Newswire
2/6/01	12:49 PM	UPDATE 1-Safety of popular arthritis drugs under US review.	Reuters News
2/6/01	2:30 PM	Pfizer Inc. Reiterated 'Buy' at Dain Rauscher Wessels	Bloomberg News
2/6/01	3:30 PM	HIV Treatment Interruption May Offer Advantages, Doctors Say	Bloomberg News

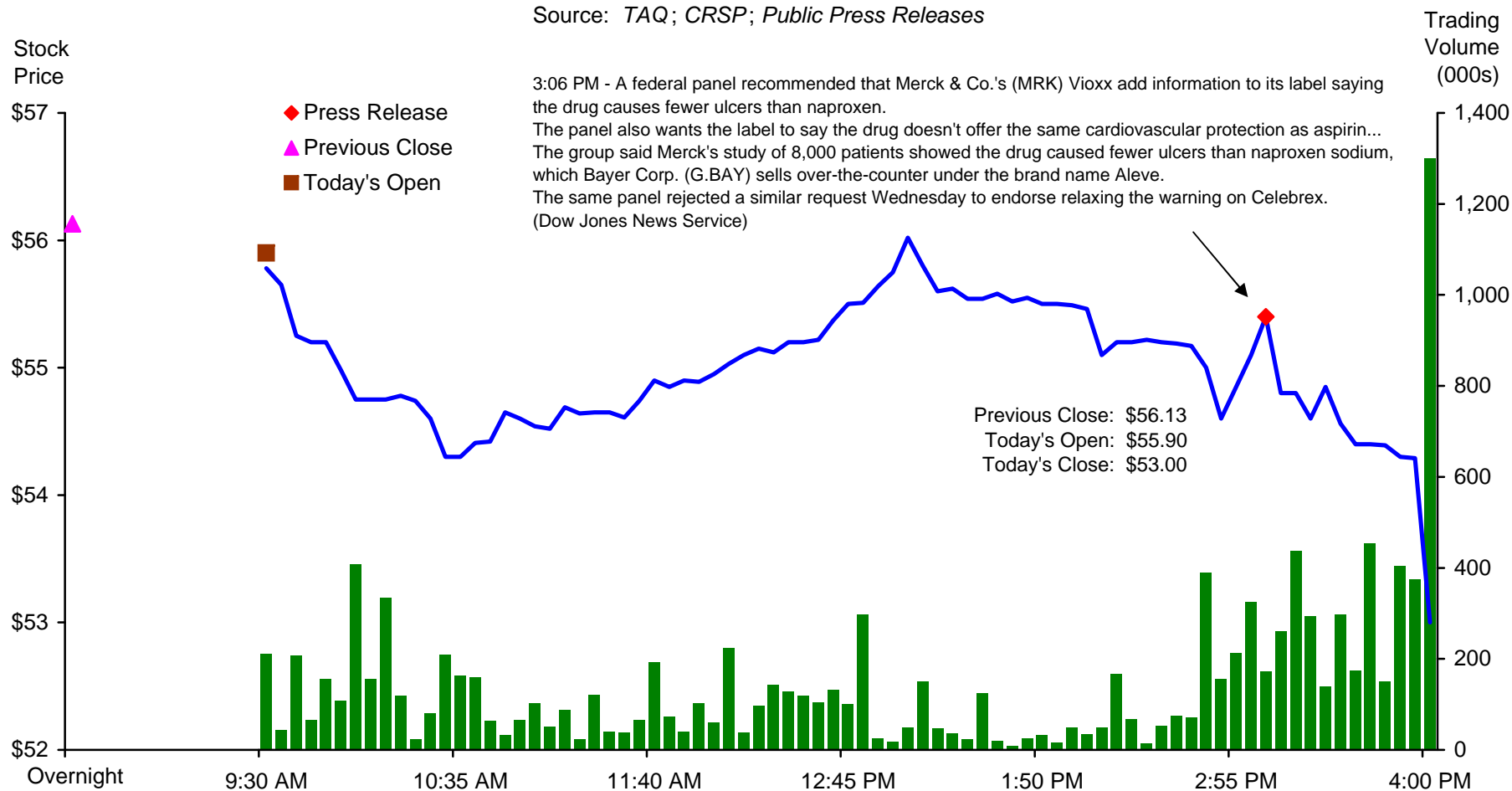
Date	Time	Headline	Source
2/6/01	4:06 PM	Lilly Shares Fall as Rival Pfizer Drug Wins Approval (Update2)	Bloomberg News
2/6/01	4:15 PM	Pharmacia Doesn't Show New Drug Benefit, Review Says (Update2)	Bloomberg News
2/6/01	6:45 PM	Pharmacia again warned about Celebrex promotion.	Reuters News
2/6/01	6:53 PM	Pharmacia sues Alcon over patent for glaucoma drug.	Reuters News
2/6/01	7:24 PM	UPDATE 2-Safety of popular arthritis drugs under US review.	Reuters News
2/6/01		Pills on a pedestal Celebrex and Vioxx have been heralded as wonder arthritis drugs. But the FDA has safety concerns.	USA Today
2/6/01		SUPER-ASPIRIN TESTS MAY BE KILLING PEOPLE, RESEARCHERS FEAR	Buffalo News
2/6/01		Arthritis Drug Under Siege	The Age
2/6/01		Talking pills help elderly.	Australian
2/6/01		Mature Outlook; Tai Chi gentle enough workout for seniors of every fitness level	Morning Star
2/6/01		Pills on a pedestal Celebrex and Vioxx have been heralded as wonder arthritis drugs. But the FDA has safety concerns.	USA Today
2/6/01		INSIDE THE INDUSTRY - MERCK/PHARMACIA: ARE VIOXX AND CELEBREX 'WONDER' DRUGS?	American Health Line
2/6/01		New Jersey-Based Drug Firms Seek Softer Warning Labels on Painkillers	Knight Ridder Tribune Business News - KRTBN
2/7/01	5:20 AM	Pfizer Inc. Reiterated Near-Term 'Buy' at Merrill	Bloomberg News
2/7/01	8:01 AM	Biovail Announces Generic Procordia XL 30mg Final Approval, Teva to Launch Product Immediately	Business Wire
2/7/01	9:03 AM	Merck's Vioxx Safety Warning Should Remain, FDA Review Says	Bloomberg News
2/7/01	11:01 AM	Fed - Govt blames PBAC for blowout in celebrex cost.	Australian Associated Press
2/7/01	11:31 AM	Pharmacia Tells FDA Panel Celebrex Is Safer Than Older Drugs	Bloomberg News
2/7/01	12:04 PM	TEVA ANNOUNCES FINAL APPROVALS OF NIFEDIPINE XL 30MG AND ETODOLAC ER 400MG WILL LAUNCH IMMEDIATELY	Business Wire
2/7/01	1:18 PM	FDA Warns Pharmacia On Mktg Presentations For Celebrex	Federal Filings Newswires
2/7/01	1:38 PM	WSJ:Pharmacia, Pfizer Warned For Celebrex Ads	Dow Jones News Service
2/7/01	1:42 PM	Pharmacia/FDA -2:Co Says It Has Stopped Audio Conferences	Federal Filings Newswires
2/7/01	1:53 PM	FDA Issues Stern Warning on 'Misleading' Marketing of Arthritis Drug Celebrex	Dow Jones Business News
2/7/01	2:10 PM	Schering, Progenics Working to Develop New Class of AIDS Drugs	Bloomberg News
2/7/01	2:21 PM	Pharmacia/FDA -3: Doctor Says He'll Respond To FDA Letter	Federal Filings Newswires
2/7/01	2:25 PM	FDA Panel: Celebrex Stomach Claims Not Proven	Dow Jones News Service
2/7/01	2:32 PM	Pharmacia Hasn't Proven Celebrex Safety Advantage, Panel Says	Bloomberg News
2/7/01	2:48 PM	FDA Panel Rejects Claims That Celebrex Eases Stomach Side Effects	Dow Jones Business News
2/7/01	2:50 PM	Aust Govt blames PBAC for blowout in celebrex cost.	Australian Associated Press
2/7/01	3:00 PM	News Highlights: Anheuser Busch 4Q Net 23c/Share Vs 20c	Dow Jones News Service
2/7/01	3:02 PM	News Highlights: Anheuser Busch 4Q Net 23c/Share Vs 20c	Dow Jones International News
2/7/01	3:10 PM	Development of Caspase Inhibitors to Treat Heart Attack, Stroke, Acute Liver Failure, and Sepsis	PR Newswire
2/7/01	4:18 PM	Pharmacia's Celebrex Safety Edge Unproven, Panel Says (Update2)	Bloomberg News
2/7/01	4:26 PM	Pharmacia's Celebrex Safety Edge Unproven, Panel Says (Update2)	Bloomberg News
2/7/01	4:31 PM	Banc of America's Yaffe on Decision on Pharmacia Drug: Comment	Bloomberg News
2/7/01	4:34 PM	Public Citizen's Wolfe on Merck, Pharmacia Painkillers: Comment	Bloomberg News
2/7/01	5:06 PM	'Virtual' Gene-Based Testing Helps AIDS Doctors Choose Wisely	Bloomberg News
2/7/01	5:16 PM	Progenics CEO Paul Maddon on Developing New types of HIV Drugs	Bloomberg News
2/7/01	5:22 PM	UPDATE 2-US panel sees no safety edge for Celebrex.	Reuters News
2/7/01	5:23 PM	UPDATE 2-US panel sees no safety edge for Celebrex.	Reuters News
2/7/01	5:58 PM	FDA is told that Celebrex might not be gentler than other drugs	Associated Press Newswires
2/7/01	6:10 PM	Aust Labor seeks to haul Wooldridge into parliament over PBAC.	Australian Associated Press
2/7/01	7:17 PM	UPDATE 3-US panel sees no safety edge for Celebrex.	Reuters News
2/7/01	7:41 PM	UPDATE 4-US panel sees no safety edge for Celebrex.	Reuters News
2/7/01	10:56 PM	Fed - No cloud over Wooldridge, says Vaile.	Australian Associated Press
2/7/01		Pharmacia - FDA Review of Celebrex more Negative than Expected - Panel Could be Controversial	J.P. Morgan Securities
2/7/01		The Washington Daybook - Federal Agencies	Washington Daybook
2/7/01		FDA Hearings on Celebrex, Vioxx Labels Could Be Crucial in Arthritis-Drug Fight	The Wall Street Journal
2/7/01		Alzheimer's study investigates role of anti-inflammatories	The San Diego Union-Tribune
2/7/01		The Washington Daybook - Federal Agencies - Futures	Washington Daybook
2/7/01		FDA Hearings on Celebrex, Vioxx Labels Could Be Crucial in Arthritis-Drug Fight	The Wall Street Journal
2/7/01		Pharmacia Corporation - PHA: FDA Reviews Celebrex & Vioxx Safety Data	Salomon Smith Barney

Exhibit 11

Pharmacia Corp.

Intraday Stock Price vs. Trading Volume: 2/8/01

Source: TAQ; CRSP; Public Press Releases

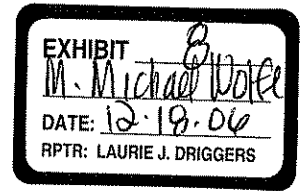


Note: Stock price data represents the last transaction price of a five minute increment. Trading volume data represents the cumulative volume traded in a five minute increment.

Exhibit 12
Public Press 8/3/01 – 8/6/01

Date	Time	Headline	Source
8/3/01	3:28 AM	Biosearch Italia Half Year Loss EUO.30-Share (Table)	Bloomberg News
8/3/01	5:34 AM	BIOSEARCH ITALIA: PERDITA PRIMO SEMESTRE A 5,3 MILIONI DI EURO	Company and Economic Releases
8/3/01	8:27 AM	Italian Stocks Mixed; Bipop Advances, Biosearch Declines	Bloomberg News
8/3/01	8:43 AM	Rittenhouse's Waterman: U.S. Stock Outlook and Picks	Bloomberg News
8/3/01	11:57 AM	Edward Jones' Skrainka: U.S. Stocks, Advice and Picks	Bloomberg News
8/3/01		Doctors Meet with Pfizer to Seek Viagra Variant for Lung Ailment	Massachusetts
8/4/01	12:20 PM	U.S. Drugmakers May Face Scrutiny on Overseas Tests, Post Says	Bloomberg News
8/5/01		Missing Data on Celebrex; Full Study Altered Picture of Drug	The Washington Post
8/5/01		NAME THAT COMPANY	The Lexington Herald Leader
8/5/01		Missing Data on Celebrex	Washington Post
8/6/01	8:00 AM	Pfizer Prescribes Concur Technologies for Global Deployment of T&E Expense Management Solution	PR Newswire
8/6/01	9:21 AM	Saks MedScience Fund's Saks: Generic Drug Industry	Bloomberg News
8/6/01	4:39 PM	Celebrex and Vioxx Vie for Osteoarthritis Market Leadership, According to a Decision Resources Study	PR Newswire
8/6/01	5:03 PM	PR Newswire New England Summary, Monday, August 06, to 5:00 p.m. EST	PR Newswire
8/6/01		SUMMARY - QUOTE OF THE DAY	American Health Line
8/6/01		Pharmacia Corp. - High Expectations met Despite Celebrex Weakness	Morgan Stanley Dean Witter
8/6/01		NICE Guidance on COX-2: details of companies' rejected appeals.(UK's National Institute for Clinical Excellence)(Brief Article)	Marketletter

EXHIBIT 68



15 of 28 DOCUMENTS

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The Washington Post

August 5, 2001 Sunday
Final Edition

SECTION: A SECTION; Pg. A11

LENGTH: 677 words

HEADLINE: Missing Data on Celebrex;
Full Study Altered Picture of Drug

BYLINE: Susan Okie, Washington Post Staff Writer

BODY:

When editors of the Journal of the American Medical Association sent medical expert M. **Michael Wolfe** an unpublished study on the blockbuster arthritis drug **Celebrex** last summer, he was impressed by what he read.

Tested for six months in a company-sponsored study involving more than 8,000 patients, the drug was associated with lower rates of stomach and intestinal ulcers and their complications than two older arthritis medicines -- diclofenac and ibuprofen.

JAMA's editors wanted to rush the findings into print, and Wolfe and a colleague provided a cautiously favorable editorial to accompany it. But in February, when Wolfe was shown the complete data from the same study as a member of the Food and Drug Administration's arthritis advisory committee, he said he saw a different picture.

"We were flabbergasted," he said.

The study -- already completed at the time he wrote the editorial -- had lasted a year, not six months as he had thought, Wolfe learned. Almost all of the ulcer complications that occurred during the second half of the study were in **Celebrex** users. When all of the data were considered, most of **Celebrex's** apparent safety advantage disappeared.

"I am furious. . . . I wrote the editorial. I looked like a fool," said Wolfe, a Boston University gastroenterologist. "But . . . all I had available to me was the data presented in the article."

JAMA's editor, Catherine D. DeAngelis, said the journal's editors were not informed about the missing data. "I am disheartened to hear that they had those data at the time that they submitted [the manuscript] to us," she said. "We are functioning on a level of trust that was, perhaps, broken."

The study's 16 authors included faculty members of eight medical schools. All authors were either employees of Pharmacia, **Celebrex's** manufacturer, or paid consultants of the company. For company-sponsored studies, JAMA now requires a statement, signed by an author who is not employed by the company, taking "responsibility for the integrity of the data and the accuracy of the data analyses," DeAngelis added.

Steven Geis, a vice president for clinical research of Pharmacia and one of the authors, said that only the first six months of data were presented because, after that, more patients withdrew from the comparison groups than from the **Celebrex** group, biasing later findings. He said a three-member executive committee, composed of authors who were not Pharmacia employees, approved the decision.

Missing Data on Celebrex; Full Study Altered Picture of Drug The Washing

"The intention really was not to be deceptive in any way," he said. "People thought that six months was the appropriate analysis."

With inclusion of the later data, "the actual difference between **Celebrex** and [the other drugs] are not as wide as they were at six months," he acknowledged. "But I think in the end, it does show that **Celebrex** has a superior safety profile."

After reviewing the full study, the FDA's arthritis advisory committee concluded that **Celebrex** offers no proven safety advantage over the two older drugs in reducing the risk of ulcer complications, said FDA spokesman Susan Cruzan. The company has requested a change in the drug's labeling to state that it is indeed safer, but the FDA has asked for additional information before making a decision.

Meanwhile, the JAMA article and editorial have likely contributed to **Celebrex's** huge sales. "When the JAMA article comes out and confirms the hype, that probably has more impact than our labeling does," said Robert J. Temple, director of medical policy at the FDA's Center for Drug Evaluation and Research.

James Wright, a professor of clinical pharmacology at the University of British Columbia, said he complained to JAMA after noticing differences between the published report and the data presented to the FDA. He praised the Public Citizen's Health Research Group, a consumer organization, for filing a lawsuit that led to the agency's putting all drug studies presented to its advisory committees on its public Web site.

"Otherwise, we still wouldn't know this," Wright said. "We would still be in the dark."

LOAD-DATE: August 5, 2001

EXHIBIT 69

Saturday 1 June 2002

BMJ

EXHIBIT

32
1-12-07 DS

Are selective COX 2 inhibitors superior to traditional non steroidal anti-inflammatory drugs?

Adequate analysis of the CLASS trial indicates that this may not be the case

Selective cyclo-oxygenase 2 (COX 2) inhibitors, including celecoxib (Celebrex) and rofecoxib (Vioxx), are hypothesised to have a lower risk of gastrointestinal complications than traditional non-steroidal anti-inflammatory drugs.¹ In September 2000 the celecoxib long term arthritis safety study, better known as CLASS, was published in *JAMA*.² This trial, widely cited and distributed, concluded that a COX 2 inhibitor was associated with a lower incidence of complications than traditional non-steroidal anti-inflammatory drugs. What was much less widely publicised were criticisms that contradicted this conclusion.

CLASS was reported as a three arm trial comparing celecoxib 800 mg/day with ibuprofen 2400 mg/day and diclofenac 150 mg/day in osteoarthritis or rheumatoid arthritis. Clinically relevant upper gastrointestinal ulcer complications (bleeding, perforation, or obstruction) and symptomatic ulcers during the first six months of treatment were described as the two main outcome measures, comparing incidence rates for celecoxib and a traditional non-steroidal anti-inflammatory drug (fig 1). It was concluded that, compared with the traditional non-steroidal anti-inflammatory drug, celecoxib "was associated with a lower incidence of symptomatic ulcers and ulcer complications combined."³ The trial was funded by celecoxib's manufacturer Pharmacia.

An article in the *Washington Post* in August 2001⁴ and two letters published in *JAMA* in November 2001⁵ drew attention to the fact that complete information available to the United States Food and Drug Administration contradicted these conclusions. The paper reporting CLASS² actually referred to the combined analysis of the results of the first six months of two separate and longer trials. The protocols of these trials differed markedly from the published paper in design, outcomes, duration of follow up, and analysis.

Two comparisons were originally planned: celecoxib versus ibuprofen, and celecoxib versus diclofenac. The Food and Drug Administration was concerned that selective COX 2 inhibitors could interfere with the benefits of COX 2 in ulcer healing.⁶ This could lead to a long term increase of ulcer related complications that occur without warning symptoms.⁴ Therefore the pre-specified primary outcome was ulcer related complications, not symptomatic ulcers, in both trials, while the maximum duration of follow up was 15 and 12 months respectively.⁷⁻⁸

A two step procedure was planned to control for a type 1 error: after comparing celecoxib with the

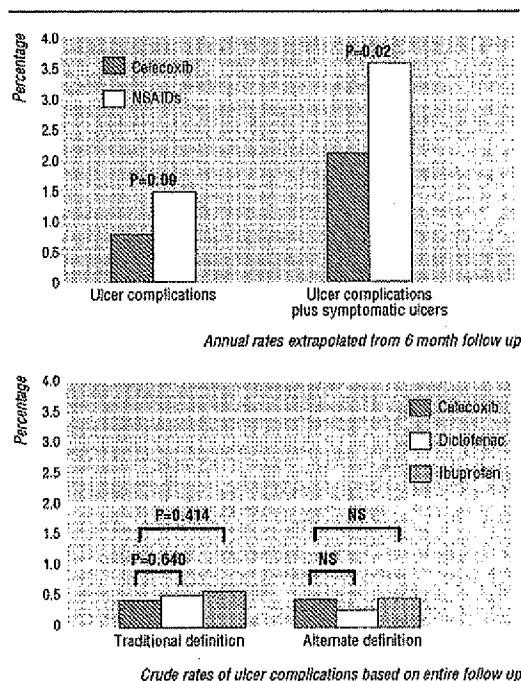


Fig 1 Main results according to published report (top) and pre-specified protocol (bottom). Alternate definition of ulcer related complications, pre-specified by the FDA, included more stringent criteria to address serious gastrointestinal bleeding. P values are from log rank tests.

non-steroidal anti-inflammatory drugs combined, a pairwise comparison of celecoxib with each of the two non-steroidal anti-inflammatory drugs, ibuprofen and diclofenac, had to be done. The protocol explicitly specified that celecoxib would be claimed to be different from the traditional non-steroidal anti-inflammatory drug only if both overall and pairwise comparisons were statistically significant for ulcer related complications.⁷

Analysis according to a pre-specified protocol showed similar numbers of ulcer related complications in the comparison groups (fig 1).⁷⁻⁸ Almost all the ulcer complications that had occurred during the second half of the trials were in users of celecoxib (fig 2). When an alternate definition of ulcer related complications (pre-planned by the Food and Drug Administration) was used, a non-significant trend was found in favour of diclofenac (fig 1).⁷⁻⁸ These results clearly contradict

Editorials

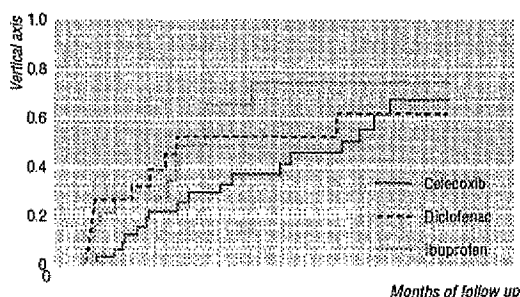


Fig 2 Kaplan-Meier estimates for ulcer complications according to traditional definition. Results are truncated after 12 months, no ulcer complications occurred after this period. Adapted from Lu 2001.⁷

the published conclusions.² They were available when the manuscript was submitted, but were neither referred to in the article² nor reported to JAMA.⁹

Two issues cause concern. Firstly, the authors' explanations⁹ for these serious irregularities were inadequate. They failed to justify the post hoc changes in design, outcomes, and analysis and provided an unconvincing explanation for considering the six month follow up only. They argued that a large and differential dropout rate had occurred during the later stage of the trial, which depleted patients with gastrointestinal adverse events preferentially in the groups taking non-steroidal anti-inflammatory drugs and that these patients were at higher risk of developing ulcer related complications.⁹ However, the absolute number of dropouts and withdrawals, both overall and due to gastrointestinal adverse events, increased gradually, without any sudden increase after six months, and withdrawal rates stayed roughly constant in different treatment groups during the entire follow up period. In addition, there was no robust evidence that gastrointestinal adverse events were actually a risk factor for ulcer related complications.⁷⁻⁸

Secondly, the flawed findings published in the original article² appear to be widely distributed and believed. About 30 000 reprints of CLASS were bought from the publisher (W Bartolotta, personal communication), and a recent search of the Science Citation Index yielded 169 articles citing it, more than 10 times as many citations as for any other article published in the same issue. This wide distribution and citation has coincided with the sales of celecoxib increasing from \$2623m in 2000 to \$3114m in 2001.¹⁰

Publishing and distributing overoptimistic short term data using post hoc changes to the protocol, while omitting disappointing long term data of two trials, which involved large numbers of volunteers, is misleading. While some of the problems related to CLASS were partially covered in the news sections of *BMJ*¹¹ and other journals, it was not emphasised how flawed the trial actually was,² and how inadequate the authors' justifications.⁹ Consequently, CLASS may still be relied on by many physicians without reference to these flaws. In our experience most still believe the findings published originally.² For example, most of 58 physicians attending an osteoarthritis workshop in Berne, Switzerland, in December 2001 had not realised that CLASS was seriously biased.

In contrast with the CLASS trial,² the VIGOR trial,¹² which was similar in design and outcomes, found

an unequivocal benefit of another selective COX 2 inhibitor, rofecoxib, over traditional non-steroidal anti-inflammatory agents. Four potential reasons for this discrepancy warrant further exploration. Firstly, aspirin was used concurrently by about 20% of patients in CLASS (but not in VIGOR). Secondly, naproxen, rather than diclofenac (which has greater COX 2 selectivity¹), was used as the comparator in VIGOR. Thirdly, CLASS employed higher doses of celecoxib than usual, and finally rofecoxib has considerably higher COX 2 selectivity than celecoxib.¹

Two things need to happen now. Firstly, an "industry independent," individual patient data meta-analysis of all large scale, long term trials of selective COX 2 inhibitors must be performed to include both published and unpublished data. Secondly, the wide dissemination of the misleading results of the CLASS trial has to be counterbalanced by the equally wide dissemination of the findings of the reanalysis according to the original protocol. If this is not done, the pharmaceutical industry will feel no need to put the record straight in this or any future instances.

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Anne WS Rutjes *research fellow*

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MRC Health Services Research Collaboration, Department of Social Medicine, University of Bristol, Bristol BS8 2PR

PJ is supported by the Swiss National Science Foundation, AR by the Netherlands Organisation for Scientific Research, and PD by the UK Medical Research Council.

We thank Barker Bausell, Jiri Chard, and Matthias Egger for helpful comments, and Wanda Bartolotta for providing data on the number of reprints made available by JAMA.

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EXHIBIT 70

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

From: Witter, James P
Sent: Friday, March 11, 2005 2:37 PM
To: Meister, Karen G
Cc: Lemley, Lee
Subject: Follow-up to Barton committee
 There were 6 items that were discussed as issues that needed follow-up:

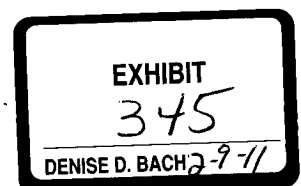
1. JAMA September 13, 2000 vol. 284 no. 10 p. 1247-1255.

The issue revolved around the fact that the GI data in the JAMA article only presented the 6-month vs. the entire study outcome data as was submitted in the CLASS sNDA. My recollection at the time was that the results of CLASS as presented in the JAMA article were qualitatively similar to the overall data in the CLASS review. I have constructed a table below which looks at these GI results from the perspective of p-value (celecoxib vs. NSAIDs) comparisons since, often times, this is how readers decide whether the results are significant or not. Also, since the data on aspirin combined with celecoxib in the JAMA article clearly show loss of any benefit for celecoxib, I will not address that issue. These data are taken either from the results section of the JAMA article, or Tables 13, 14, 26 or 30 of my CLASS sNDA review. The results are to reflect those of NSAIDs, in this case it is clear (either in the JAMA article or the sNDA result) that this acronym only refers to ibuprofen and diclofenac and not the entire class of drugs.

Category	Endpoints			
	Upper GI ulcer complications		Upper GI ulcer complications + Symptomatic ulcers	
	6 month	Entire study	6 month	Entire study
All patients				
JAMA	0.090	NA	0.020	NA
NDA	0.092	0.450	0.023	0.040
Non-aspirin users				
JAMA	0.040	NA	0.020	NA
NDA	0.037	0.185	0.017	0.020

As can be seen from this table, if a cutoff of 0.05 is employed as an indication of significance, the "conclusions" from the 6-month data are the same as the entire study data with the important exception in the non-aspirin users in the NDA (bolded result) which clearly differ from the results at 6 months. It should be noted that the p-value results for the non-aspirin users in the entire study were $p = 0.037$ for the comparison of

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celecoxib vs. ibuprofen and $p = 0.972$ for celecoxib vs. diclofenac. These results suggest that the failed NSAID comparison in the entire study reflected the failure of celecoxib to distinguish itself from diclofenac and were enough to override the benefit compared to ibuprofen. Therefore, the comparisons in the JAMA paper are misleading in that they do not include the entire study results which would have shown that the difference noted at 6 months in non-aspirin users was not sustained to the end of the study since celecoxib was not able to "beat" diclofenac even though it did demonstrate a favorable result compared to ibuprofen. The Conclusions of the abstract portion of the paper states "In this study, celecoxib, at dosages greater than those indicated clinically, was associated with a lower incidence of symptomatic ulcers and ulcer complications combined....compared with NSAIDs at standard dosages". This summary conclusion does not appear to be misleading since the information as presented in the table above does not differ in this comparison between the 6-month and entire study data. However, the important distinction was that the primary endpoint of the CLASS trial in the sNDA was the comparison of upper GI complications, not the expanded endpoint to include symptomatic ulcers.

2. What was presented at the CLASS pre-decisional meeting?

To the best of my knowledge, the data presented at this meeting included the CLASS (or the original NDA) data since I have not been able to find (at this point) information that either SUCCESS 1 or the Alzheimer's IQ5-97-02-001 study (see response 3 below) were presented.

3. What was presented at the September 21, 2001 regulatory briefing and what were the outcomes of this meeting?

As noted in the handout for this meeting, the parecoxib (i.e. CABG study 035) and celecoxib NDA, CLASS sNDA and SUCCESS-1 data were discussed. Again, I have not been able to find any information to suggest that the Alzheimer's 001 data were presented at this regulatory briefing meeting. However, data from [REDACTED] was presented at the (closed) Arthritis Advisory Committee meeting on December 7, 2001 (attached Powerpoint presentation). The [REDACTED] presented at this Advisory meeting came from [REDACTED]

[REDACTED] Products June 7, 2001. Therefore, it appears that the first date that the Alzheimer's data become available to the Division of Anti-inflammatory, Analgesic and Ophthalmic Drug Products was November 26, 2001 (letter date) which was received November 27, 2001 (CDER stamp date) and these results were discussed at the Arthritis Advisory meeting of December 7, 2001. The 120-safety update appears to be a late response [according to 21 CFR 314.50 (d)(5)(vi)(b)] to the June 12, 2001 APPROVABLE letter for the CLASS submission (S-009). Data from Table T8.2 is included in this response as a faxed document. Of note, to my knowledge, the Alzheimer's 001 data was not included in any correspondence to the ACUTE pain indication (S-010) which was originally submitted to the Division on December 18, 2000.

I have not been able to find other information regarding the outcomes of the regulatory briefing meeting beyond what was previously discussed.

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4. Check on the status of the NSAID litigation (Docket 02N-0471).

This litigation is still active.

5. Check the discussion regarding safety in the Parecoxib NDA.

Since I do not recall exactly the paragraph(s) in question, I will refer to my NDA review at the next meeting to address the question.

6. Find the members of the adjudication committee for the first CABG study (193-99-02-035).

The committee members and charter as attached to this document.



CABG 035
Committee cha

FDACDER 004340

FDA016268

EXHIBIT 71

From: Weiner, Ethan
Sent: Thursday, March 01, 2001 12:22 PM
To: Shafner, Lori S
Subject: CBX-0049616_ RE: **For review** Celebrex Q&As -PFE Shareholder's Meeting

Everybody rejected the idea that the combined analysis meant anything -- FDA, advisory committee, commentators from the press. It just would sound really bad for us to keep insisting on that. We should say:

- For the chosen endpoint we beat ibu (only)
- In other ways (symptoms, blood loss) we beat both
- Vioxx only beat naproxen (agree not to discuss unless pushed)
- Neither product will get generalizable claims most likely (as above)

I am strongly opposed to say we beat the aggregated NSAIDs as well as ibu individually. Its misleading.

-----Original Message-----

From: Shafner, Lori S
Sent: Wednesday, February 28, 2001 9:13 PM
To: Weiner, Ethan
Subject: RE: **For review** Celebrex Q&As -PFE Shareholder's Meeting

Ethan,

What are your thoughts about removing the superiority to diclofenac and ibuprofen combined for the CLASS question? Mona had made a point to include.

Thanks for your input. I guess we expanded the competitor table to broadly. Will revise.

Thanks

Lori

-----Original Message-----

From: Weiner, Ethan
Sent: Wednesday, February 28, 2001 7:42 AM
To: Shafner, Lori S
Cc: Forster, Eliot R; Fletcher, Mark P; Loose, Leland D
Subject: FW: **For review** Celebrex Q&As -PFE Shareholder's Meeting

Comments in the attached document. Looks good. Thanks for sending.

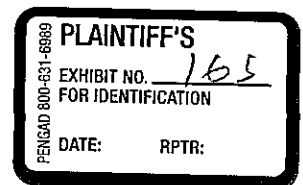
-----Original Message-----

From: Shafner, Lori S
Sent: Tuesday, February 27, 2001 5:34 PM
To: Forster, Eliot R; Weiner, Ethan
Cc: Fletcher, Mark P; Loose, Leland D; Morosky, Virginia M; White, Joanne S
Subject: **For review** Celebrex Q&As -PFE Shareholder's Meeting

Dear Eliot, Ethan,

Please find attached the Q&A document for Celebrex which must be submitted by Friday to Sandra DiRoma for the Briefing Books in preparation for the April 26th Shareholders Meeting. All key team folks have reviewed and their comments have been incorporated. Additionally have discussed submission disclosures with Peter Isakson to ensure alignment with PHA. Privileged

Privileged



Your comments would be appreciated by COB Thursday . Changes since the November '00 Analysts meeting are marked in red underline. Please keep in mind that we are to focus on current, hot topics and that Eric Sirota and Mitch Gandelman will prepare a briefing to cover competitive/commercial Q& As.

Regards,

Lori

<< File: apr01Celebrex.doc >>

PS Mark-pls see competitor table. We have removed rows for Pennsaid, Nabumetone , etodolac & apaptosyn per Leland's request.

Lori Shafner, Ph.D.

Global Project Leader, Celebrex & COX-2 Alliance

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EXHIBIT 72

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

ALASKA ELECTRICAL PENSION
FUND, et al., On Behalf of Themselves
and All Others Similarly Situated,

Plaintiffs,

vs.

PHARMACIA CORPORATION, et al.,

Defendants.

) No. 03-1519 (AET)
) **(Consolidated)**

) CLASS ACTION

) EXPERT REPORT OF NICHOLAS P.
) JEWELL, PH.D.

EXPERT REPORT OF NICHOLAS P. JEWELL, Ph.D.

Summary of Opinions

The CLASS study examined the relative effects of three drugs, Celebrex, diclofenac and ibuprofen (non-steroidal anti-inflammatory drugs or NSAIDs) with regard to reducing the risk of clinically significant upper gastrointestinal adverse events (CSUGIEs) for osteoarthritis or rheumatoid arthritis patients over long periods of treatment exposure. I reviewed the primary publication from the study--published in the *Journal of the American Medical Association* (JAMA)--that claimed that Celebrex had a statistically significant advantage over the NSAID competitors, a conclusion that was initially included in an April 17, 2000, press release. After review of the study protocols and the statistical analysis of the study data, I find that this conclusion is incorrect and based on inappropriate statistical techniques using an approach that was likely to lead to distorted results. Only through contravening the protocol in terms of the follow-up data used, and the manipulation of subgroups and the choice of endpoints, were apparently significant results claimed, in the process violating the statistical principles needed to justify the results. In particular, the published CLASS analysis:

- Inappropriately discarded all data beyond 6 months of observation
- Inappropriately focused on *post-hoc* subgroup comparisons and failed to indicate this in various announcements
- Inappropriately emphasized *post-hoc* secondary endpoint comparisons
- Did not differentiate the comparisons between Celebrex and ibuprofen and Celebrex and diclofenac, failing to note the absence of any differences in the latter case.

In summary, a proper analysis of the data shows little if any advantage for Celebrex with regard to risk of the defined serious gastrointestinal outcomes, particularly with regard to diclofenac.

Qualifications

1. For the past 30 years, I have been a Professor in the Division of Biostatistics, School of Public Health, and in the Department of Statistics, both at the University of California, Berkeley. Specifically, I have served as a Full Professor (1987 – present); Associate Professor (1983 – 1987); and Assistant Professor (1981 – 1983). Previously, I was an Assistant Professor in the Department of Statistics at Princeton University, Princeton, New Jersey (1979 – 1981) where I also served as Director of the Statistical Laboratories. At Berkeley, I have also held the position of Chair of the University of California Graduate Group in Biostatistics from 1986 – 1994, and from 2000 – 2007. From 1994 – 2000, I served as Vice Provost at the University of California, Berkeley, in the Office of the Chancellor. From 2007 – 2008, I served as Vice Provost, Academic Personnel, at the Office of the President of the University of California. A true copy of my CV is attached as Exhibit A.

2. I have served as a member of the National Academy of Sciences Committee on National Statistics (1993 – 1996) and of the Committee on Theoretical and Applied Statistics (1994 – 1996). I received my Ph.D. in Mathematics from the University of Edinburgh, Scotland in June 1976, and was a post-doctoral Harkness Fellow at Stanford University and the University of California at Berkeley from 1976 – 1978 (funded by the Commonwealth Fund of New York). In 1978-1979 I was a Research Fellow in the Medical Statistics Unit at the University of Edinburgh, Scotland. I have also held Visiting Professor appointments at Oxford University, England, in Spring 1990, at the London School of Hygiene and Tropical Medicine in Spring 2007, and at Kyoto University in Japan in Fall 2009. During April – May 2007, I was a resident Fellow of the Rockefeller Foundation at their Study Center in Bellagio, Italy.

3. I am the author of a textbook, “Statistics for Epidemiology,” (Chapman and Hall, New York 2003), as well as approximately 140 peer-reviewed articles in the field of biostatistics. My areas of expertise include the analysis and interpretation of survival data and other statistical methods to investigate risk factors for

disease outcomes, and longitudinal data analysis. I am a founding editor of the *International Journal of Biostatistics*, Senior and Founding Editor for the journal *Statistical Applications in Genetics and Molecular Biology*, and Associate Editor for the journal *Biometrika*. In 2005, I received the Snedecor Award, from the Committee of Presidents of the Statistical Societies, awarded to “an individual who was instrumental in the development of statistical theory in biometry.” The award is associated with the best publication in biostatistics in the world in the previous 3 years. I also received a Distinguished Teaching Award from the School of Public Health, University of California at Berkeley, in 2004.

4. I am or have been a member of several international statistical societies including the International Biometric Society, the Institute of Mathematical Statistics, and the American Statistical Association. I am currently (2010 – 11) Chair, of the Section on Statistics in Epidemiology of the American Statistical Association. I was made a Fellow of the American Statistical Association in 1991, and a Fellow of the Institute of Mathematical Statistics in 1996. I served as President of the Western North American Region of the International Biometric Society in 1991 – 1992, and as Treasurer of the Institute of Mathematical Statistics from 1985 – 1988. In 2007, I was appointed as Fellow of the American Association for the Advancement of Science (AAAS).

5. In the past 5 years, I have testified at depositions in a blood products case (In re: Factor VIII or IX Concentrate Blood Products Litigation, MDL NO. 986, N.D. Ill. Case No. 1:93CV7452), a case concerning the malfunctioning of medical devices (In re: Guidant Implantable Defibrillators Products Liability Litigation, MDL No. 1708, D. Minn. Case Nos. 05-1708, 06-00025 and 05-02596), thrice on cases involving the adverse cardiovascular effects of Celebrex and Bextra, on a case regarding pain relief and Neurontin, and on a case regarding the adverse cardiovascular effects of Avandia (In re: Avandia Marketing Sales Practices, and Product Liability Litigation, MDL NO. 1871, E.D. PA. Case No. M:07-CV-01871 CMR). My consulting rate for this project is \$475 per hour. I have relied on the documents referenced in this report, the

attached Exhibit B, and upon my experience in the field of biostatistics, in preparing this report. My opinions, contained herein, are all stated to a reasonable degree of scientific certainty

Background & Context

Statistics and the P-Value

6. Statistical methods are extensively used to draw inferences regarding properties of random quantities in populations and the effect of explanatory variables on such properties. For example, we may be interested in the frequency of an adverse event in a population and whether this frequency differs if individuals are subject to different treatments or exposures. Statistical ideas are required since it is usually infeasible or impossible to obtain data on an entire population so that sampling is required with the consequent need to understand sampling variation, that is, how one sample obtained might differ from another sample obtained in the same fashion.

7. In many cases, hypotheses are made about the relationship between exposure variables and the properties of a relevant outcome. For example, data might be collected from individuals exposed to two drugs with the intent of collecting information as to whether the frequency of an adverse event is the same under both drug exposures or not. In many cases, a *null hypothesis* is assumed that there is no difference between the probabilities of an adverse event for the two distinct drug exposures. In this context, the *p-value* is widely used, particularly in biomedical research, to assess the evidence as to whether the data supports the null hypothesis or suggests that it may be incorrect (in this case, that a particular drug has a higher rate of adverse events than its comparator). The *p-value* represents the probability that a summary observed comparison between the adverse event frequencies (based on the sampled data) would be as large, or larger, than observed *if the null hypothesis of no difference is correct*¹. In

¹ Goodman, S. "P value", *Encyclopedia of Biostatistics*, Eds. P. Armitage and T.

this context, a small p-value reflects a low probability that the observed drug group comparison is likely due to chance if the null hypothesis were true, suggesting that, in fact, the null hypothesis is incorrect so that the adverse event rates are likely different depending on which drug is used. On the other hand, a large p-value suggests that it is quite likely that observed differences between the drug exposures are simply due to chance variation so that it is entirely plausible that there is no (or extremely little) difference in the adverse event rates under the two drugs. Conventionally, a benchmark of 0.05 is used for the observed p-value in efficacy trials (although this is often appropriately raised for adverse effect trials); that is, evidence against the null hypothesis is deemed statistically significant if the p-value is less than 0.05, and statistically insignificant if the p-value is greater than or equal to 0.05.

Randomized Clinical Trials

8. In many cases sampling from separate populations exposed to two or more drug treatments may be inadequate to derive appropriate comparisons *since the treatment groups may fundamentally differ in other crucial ways*. Perhaps sicker patients are more likely to be prescribed drug A than drug B meaning that they are also more likely to suffer an adverse event *a priori* even if the two drugs have identical effects on any given patient. Similarly, older patients may be more likely to use drug B than drug A with the same resulting effect of complicating our interpretation of observed adverse events in the two samples of patients exposed to the two drugs. A fundamental way of resolving this complication is to ensure that the two groups of patients are fundamentally the same in all other respects by randomly allocating their treatment. This procedure describes simplistically the basis of what is known as a *randomized clinical trial*.

9. There is now a rich literature on the fundamentals of clinical trial design, analysis and reporting. Fundamental principles of good design include (i) an

Colton, 1998, Wiley, New York.

appropriate choice of population, methods of random allocation of treatments (and placebo, if appropriate), (ii) the value of blinding, or masking, participants and investigators to treatment allocation, (iii) the choice of sample size, (iv) methods of participant recruitment, (v) issues surrounding data collection and measurement of variables, (vi) adherence to assigned treatment, (vii) choice of outcome variables, (viii) data analysis issues, and (ix) accurate reporting and interpretation of results².

10. The background, objectives, design, management and analysis plan for a randomized clinical trial is laid out in a crucial document known as the *protocol*. This document is developed and completed before participant enrollment and “should remain essentially unchanged except perhaps for minor updates.”³ Of particular importance in the latter regard are issues surrounding (i) the choice of endpoint and (ii) the choice of subgroups where treatment comparisons may also be of interest in addition to a general population comparison.

11. It is standard for a clinical trial to focus on a primary question of interest, usually determined by picking a *primary endpoint* for analysis. In some cases, the investigators may also wish to consider secondary questions such as whether the randomized groups differ on other outcomes or endpoints, or whether particular subgroups differ with regard to the primary question. It is crucial that the “primary question, as well as any secondary or subsidiary questions, should be carefully selected, clearly defined and stated in advance.”⁴ While there is little difficulty in designing a trial to address the primary question of interest, both kinds of secondary questions (different endpoint, subgroup comparisons) raise several methodological issues: for example, “if enough statistical tests are done, a few will be significant by chance alone when there is

² Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York.

³ Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York.

⁴ Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York.

no true intervention effect.”⁵ This challenge is addressed by limiting severely the number of secondary questions, and/or by adjusting the p-values to allow for the number of pre-specified comparisons to be considered. The relevance of pre-specification is to avoid the bias that is almost always incurred by allowing investigators to select appropriate comparisons—from many possibilities—after the data has been collected and analyzed. In most cases, information on secondary questions is often considered to be exploratory rather than confirmatory since the trial is usually designed with the primary question in mind. In short, secondary comparisons are most credible when they are clearly specified in the trial protocol and statistical plan. The least desirable comparisons are those that involve “post hoc analysis, sometimes referred to as ‘data dredging’ Because many comparisons are theoretically possible, tests of significance become difficult to interpret and should be challenged. Such analyses should serve primarily to generate hypotheses for evaluation on other studies.”⁶ There are many examples where statistically significant subgroup comparisons, for example, have failed to be confirmed in subsequent studies. It has often been suggested that “unless the main overall comparison is significant, investigators should be particularly conservative in evaluating significant subgroup findings.”⁷

The Celecoxib Long-term Arthritis Safety Study (CLASS)

12. The Celecoxib Long-term Arthritis Safety Study (CLASS) was a combination of two double-blind, randomized studies comparing the incidence of clinically significant upper gastrointestinal adverse events (CSUGIEs) for osteoarthritis or rheumatoid arthritis patients exposed to celecoxib (at a dose of 400mg twice a day) to

⁵ Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York.

⁶ Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York.

⁷ Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York.

either ibuprofen (800mg three times a day; Study 025) or diclofenac (75mg twice a day; Study 102)⁸. (Celebrex is simply the brand name for celecoxib.) I have been asked to provide opinions regarding the published statistical analysis and interpretation of the CLASS data, with particular attention to the censoring of results after only six months of follow-up. The materials I have relied upon are set forth in this report and in Exhibit B hereto.

The CLASS Trial: Protocol and Duration

13. The two comparative studies comprising CLASS were essentially identical in design other than the drug taken by the active control group (ibuprofen or diclofenac). The original protocols for the studies apparently called for a treatment period defined as the “52-week interval during which study medication was taken or until the trial was officially concluded, whichever occurred first.”⁹ This is clarified in the CLASS Final Report¹⁰ that indicates a maximum potential treatment period of 52 weeks for the diclofenac study and 65 weeks for the ibuprofen study. The latter part of this statement recognized that due to rolling enrollments at a large number of sites, not all patients would necessarily complete a full year of treatment before the study was officially concluded, even in perfect circumstances. On the other hand “all patients were provided an opportunity to complete a minimum of 6 months of treatment.”¹¹ Other forms of

⁸ Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255.

⁹ H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998.

¹⁰ Final report for a multicenter, double-blind, parallel group study comparing the incidence of clinically significant upper gastrointestinal events between Celecoxib 400 mg bid and ibuprofen 800 mg tid or diclofenac 75 mg bid. The Celecoxib long-term arthritis safety study (CLASS). Document dated May 25, 2000. Exhibit 66.

¹¹ Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255.

censoring of the full year period were allowed, for a variety of circumstances including patient withdrawal due to failure to take the medication sufficiently often or adverse effects, for example. In these situations, patients continued to be followed for evaluation of gastrointestinal endpoints for a further “2 months or until study termination.”¹² The trial was conducted for the time period September 1998 to March 2000,¹³ with patient recruitment spanning approximately 12--16 months. The need for a comparison over a 52-week period (or longer) was an important factor in the trial design, and not simply an arbitrary choice, as there was considerable interest in the long-term impact of these drugs on the gastrointestinal system (for example, over a year of treatment) rather than shorter-term effects. This was specifically an interest of the FDA, as reflected in discussions with Pfizer employees prior to development of the protocol for the studies. For example, Dr. Leland Loose recorded these notes regarding the design and analysis of the studies in a meeting with FDA officials in 2008: “Study lasts one year, not six months, since it is a new drug class, mainly for safety. More concerned with duration of study, not to numbers of events. Need to be able to see time course of events and if ulcer event for these drugs is the same as NSAIDs. Not interested in interim analyses, want long-term safety. Need 1,000 on celecoxib and 1,000 on non-steroidals to 12 months. Everyone needs six month, no interim analysis allowed.”¹⁴

14. A total of 8059 patients were randomized: 4031 to Celebrex, 2019 to diclofenac, and 2009 to ibuprofen.¹⁵ Ninety-one patients never took a single dose of

¹² Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255

¹³ Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255

¹⁴ Deposition of Dr. Leland Loose, August 18, 2010, pp. 159-160. Exhibit 121.

¹⁵ Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with

their assigned medication, thus leaving 7968 patients with some follow-up data to analyze: 3987 assigned to celecoxib, 1996 to diclofenac, and 1985 to ibuprofen.^{16,17} The majority of subsequent withdrawals in all groups were due to adverse events, or protocol noncompliance. No patients were lost to follow-up without reason.¹⁸

Published Analysis of CLASS Data in JAMA

15. In the original publication,¹⁹ the CLASS data was analyzed using standard time-to-event statistical techniques using cumulative event rates and the log-rank test to compare time-to-event or Kaplan-Meier curves, as proscribed in the study protocols. A Kaplan-Meier curve provides an estimate of the cumulative incidence (that is, what fraction of the participants have experienced the event of interest) as it increases over time of follow-up.²⁰ The authors described their analysis as follows: "Time-to-event analyses of upper GI complications alone or combined with symptomatic ulcers were performed based on cumulative event rates . . . for the 6-month study period. . . ."²¹ No

celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255.

¹⁶ Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255.

¹⁷ H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998.

¹⁸ H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998.

¹⁹ Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255.

²⁰ Collett, D. *Modelling Survival Data in Medical Research*, Second Edition, 2003, Chapman & Hall/CRC Press, Boca Raton, Florida.

²¹ H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998.

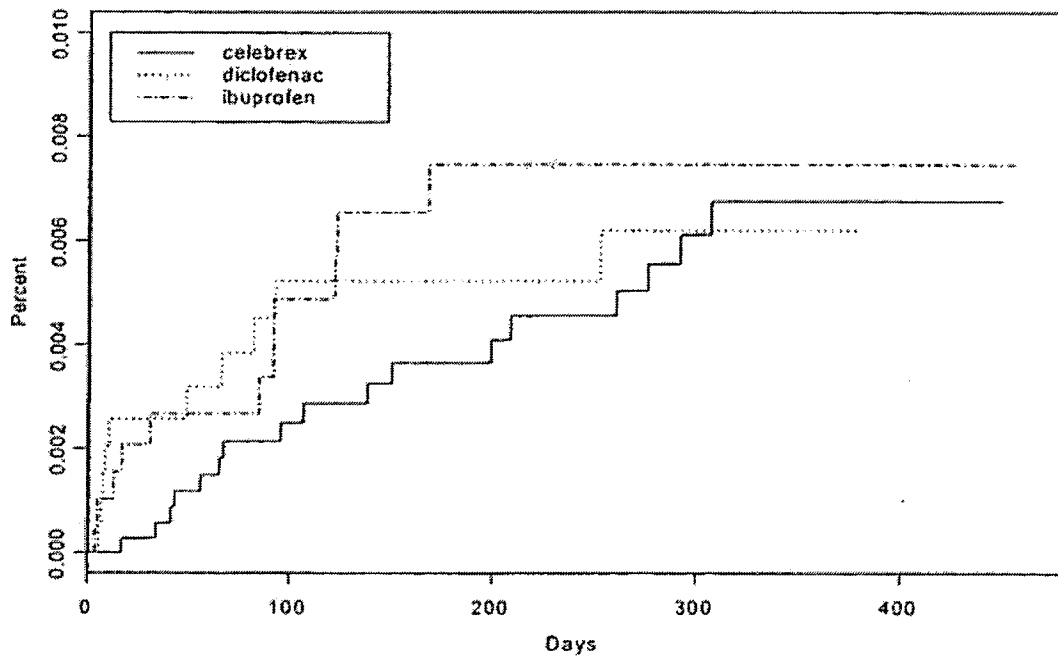
mention was made that the original protocol called for a one-year treatment period, and presumably all data was censored at 6 months. The authors reported that the Relative Risk, comparing celecoxib to the combined NSAID groups, for incidence of upper GI ulcer complications was 0.53 with a 95% confidence interval of (0.26, 1.11) with an associated p-value from the log-rank test of 0.09.²² Incidence of events beyond 6 months was not discussed in the publication despite the protocol description. This raises the question of what happened in the second six-month time period following treatment.

16. This data was clearly available to the investigators of the CLASS Study and provided to the FDA, and, in particular their statistical reviewer. The latter individual cited Kaplan-Meier curves estimating the cumulative incidence of CSUGIEs for each treatment group, describing the entire year of follow up (while accommodating loss to follow up during this period). This was noted as Figure 1 in the Statistical Reviewer Briefing Document,²³ reproduced below for convenience. Comparisons across these three incidence curves—qualitatively, and formally, in a statistical sense, assume that the censoring (or loss to follow up) is independent of the process leading to the occurrence of outcome events.

²² Silverstein, F. E., Faich, G., Goldstein, J. L., et al., Gastrointestinal toxicity with celecoxib vs nonsteroidal anti-inflammatory drugs for osteoarthritis and rheumatoid arthritis. The CLASS Study: A randomized controlled trial, *Journal of the American Statistical Association*, 2000, 284, 1247-1255.

²³ H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998.

Figure 1. Kaplan-Meier Estimator for CSUGIE Incidence



17. The associated log rank test comparing Celebrex with the combined NSAID groups, using the entire follow up information now yields a very different assessment in that the p-value is now 0.45.²⁴ In brief, the differences in cumulative incidence curves observed across the three treatment groups is likely to occur by chance 45% of the time in identical trials of this size: there is absolutely no evidence of a beneficial treatment effect. The absence of these Kaplan-Meier curves from the original publication is inexplicable to me as a medical statistician, particularly in light of the entirely different assessment provided. Note that of the 38 CSUGIEs observed over the entire study period in all three treatment groups, only 7 occurred after 6 months but 6 of these occurred in the Celebrex group (the other being in the diclofenac group)²⁵.

²⁴ H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998.

²⁵ Final Report for a Multicenter, Double-Blind, Parallel Group Study Comparing the Incidence of Clinically Significant Upper Gastrointestinal Events Between Celecoxib 400 MG BID and Ibuprofen 800 MG TID or Diclofenac 75 MG BID, Exhibit 66, Tables 1 and 2, p.6.

18. Which analysis is appropriate? It is absolutely essential that statistical analysis of time-to-event data of this kind follow the protocol regarding the definition of the primary outcome and include all relevant follow up information unless a 6 month analysis was formally pre-specified.²⁶ (This is *not* the same as indicating that differences in cumulative incidence will be estimated at various time points over the follow-up, as this is what all Kaplan-Meier curves provide.) The reason for this is that it is (consciously or subconsciously) tempting to examine the incidence estimates over time and choose, *post-hoc* (having seen the data), a time that maximizes (or enhances) any observed incidence differences between the treatment groups. It is clear, from Figure 1, that 6 months is just that choice in this case. This is similar to the reasoning as to why only *pre-specified* subgroup analyses are permitted.²⁷ Presentation of the data by time of follow-up (as in a Kaplan-Meier curve) is standard but never justifies formal comparison of treatment groups at any intermediate time point unless formally pre-specified in the protocol.

19. If an alternative follow up time is desired *post-hoc*, it is possible to carry out a proper statistical analysis that accommodates that different choices of follow-up time might have been considered for the final analysis (for example, using exactly 6 months in the CLASS publication). Specifically, statistical methods have been developed to allow for (i) either the fact that other choices of the time for incidence comparisons were possible (for example, 5 months or 9 months), or (ii) the use of the time that displays the maximum gap between the Kaplan-Meier estimators.²⁸ In either scenario, the results

²⁶ See Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York, pp. 250-253 for a preliminary discussion of the statistical implications of testing accumulating follow-up data repeatedly.

²⁷ See Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York, pp. 250-253 for a preliminary discussion of the statistical implications of testing treatment effects in subgroups involving *post-hoc* analysis.

²⁸ See, for example, Miller, R. and Siegmund, D., "Maximally selected chi-square statistics," *Biometrics*, 1982, 38, 1011-1016, and subsequent citations.

of an appropriate statistical adjustment to the standard fixed time log-rank test both will yield substantially higher p-values than the 0.09 publically reported as if the 6-month period was pre-specified. So this approach also would suggest the lack of significant evidence of a beneficial treatment effect due to celecoxib treatment.

20. In summary, the observed differences between the treatment groups in the first 6 months are plausibly due solely to chance variation given the whole picture of the full one year of data. It is inappropriate statistically to focus on the particular choice of 6 months without revealing that there was additional information and other choices were available to the investigators.²⁹

Other Viewpoints on the 6-month Follow Up Issue

21. The issue of follow up was also raised by other scientists who examined the full CLASS data available on an FDA website. In particular, a letter to the *Journal of the American Medical Association*, focused on the contradictory results provided in the publication.³⁰ These authors noted the inappropriate truncation of results at the arbitrary 6-month follow-up time. This was further noted in a second letter that notes that the “unfortunate result of the selective and partial reporting of the CLASS study is that it could mislead physicians and patients.”³¹

22. In addition, the inappropriateness of the published analysis is even supported by investigators who worked for Pfizer and Pharmacia. For example, Dr. Mona Wahba, in reviewing a proposed subsequent CLASS manuscript, noted that “the GI ms is

²⁹ See Friedman, L. M., Furberg, C. D. and DeMets, D.L. *Fundamentals of Clinical Trials*, Third Edition, Springer, New York, pp. 250-253 for a preliminary discussion of the statistical implications of testing accumulating follow-up data repeatedly.

³⁰ Hrachovec, J. B. and Mora, M., Reporting of 6-month vs 12-month data in a clinical trial of celecoxib, *Journal of the American Medical Association*, 2001, 286, 2398.

³¹ Wright, J. M., Perry, T. L. et al., Reporting of 6-month vs 12-month data in a clinical trial of celecoxib, *Journal of the American Medical Association*, 2001, 286, 2398-2399.

apologetic, weak and not convincing, since cx did not show statistical difference from Diclo even using the combined endpoint. *We are also cherry picking the data (using 6 m as study duration)*” (emphasis added).³² In addition, Dr. Emilio Arbe also commented in an email on September 4, 2000 that “With a bit of data massage, what Steve Geis and his team have done is to focus on the 6 month data, for no other reason that it happens to look better, and this time they concentrate on the non aspirin treated patients, and ignore the fact that at no time interval did we see a statistically significant difference with diclofenac, whether one looks at patients taking aspirin or not, at 6 or 12 months. Unfortunately, UK doctors would only be interested in looking at the rate of GI events with diclofenac since such a high dose of ibuprofen is rarely used.”³³

23. The CLASS study authors defended their analysis while admitting that “In retrospect, . . . we could have avoided confusion by explaining to the *JAMA* editors why we chose to inform them only of the 6-month analyses, and not the longer-term data that were available to us when we submitted the manuscript.”³⁴ The reason stated for their selective choice of follow-up period is that they believed the data to be less scientifically and clinically valid after 6 months of follow-up. Specifically, they asserted that the treatment groups were fundamentally different in nature after 6 months in several ways: (i) high levels of withdrawal (more than 50% eventually) meaning that the patient populations were selectively reduced by the later months of follow-up, (ii) more aspirin usage occurred than anticipated, (iii) fewer events occurred after 6 months, perhaps because of the depletion of susceptibles noted in (i). There was no mention of the significance of the 6-month time point in these considerations nor that these characteristics occurred differentially across the three treatment groups, except that more

³² Exhibit 22

³³ Exhibit 28

³⁴ Silverstein, F., Simon, L., and Faich, G., In reply, *Journal of the American Medical Association*, 2001, 286, 2399-2400.

NSAID patients with GI intolerance or symptomatic ulcers dropped out as compared to the celecoxib group. It is this latter claimed effect that the authors refer to as “informative censoring”.³⁵

Informative Censoring

24. Informative censoring arises when subjects who are lost to follow-up at a certain point differ in their subsequent event incidence from those who are not lost to follow-up. This can happen, for example, when clinical subjects who experience side effects are removed from observation, and it is known that those with such side effects tend to experience the outcome event of interest at a higher frequency. One extreme example occurred in early cancer clinical trials where patients who suffered a metastatic event were removed from observation in trials where the outcome was time to death. Without question those who experienced metastasis were more likely to die sooner than those without this characteristic.³⁶

25. Naturally, informative censoring of this kind may distort estimates of incidence over time. Data subject to informative censoring might give the idea that incidence of an event is declining after a certain time where in fact the incidence is growing but most high-risk individuals are lost to follow-up before they exhibit the outcome. The distortion, or bias, due to informative censoring is even more perverse, of course, when we are interested in incidence comparisons across groups, and the loss to follow-up differs across the groups. This is exactly the situation claimed here by the defendants, namely that individuals who experience GI intolerance or symptomatic ulcers, for example, tend to have subsequent higher rates of upper GI complications (thus we have informative censoring when such individuals are removed from the study), and that

³⁵ Silverstein, F., Simon, L., and Faich, G., In reply, *Journal of the American Medical Association*, 2001, 286, 2399-2400.

³⁶ See, Lagakos, S. W., “General right censoring and its impact on the analysis of survival data,” *Biometrics*, 1979, 35, 139-156; Section 4 of this paper discusses examples of informative censoring.

this occurs more in the diclofenac group than for celecoxib patients (differential loss to follow-up across groups).

26. A substantial analysis of dropout by treatment was carried out.³⁷ This showed that three primary reasons for dropout were (i) the occurrence of adverse events, (ii) treatment failure, and (iii) treatment noncompliance. There were some differences in the rates of dropout for the various causes by treatment group. For example, for treatment failure the percentages dropping out were 17.3%, 15.5% and 22.3% in the Celebrex, diclofenac, and ibuprofen groups, respectively. For noncompliance, the three rates were 14.7%, 9.9%, and 18.4% in the Celebrex, diclofenac, and ibuprofen groups, respectively. Finally, for adverse events, the dropout rates were 22.7%, 27.0% and 23.2%, in the Celebrex, diclofenac, and ibuprofen groups, respectively. There are some differences evidenced across the three groups but the differences are not dramatic and do not exhibit any systematic pattern.³⁸ For adverse events, the rate of dropout is higher in the diclofenac group but the other two groups are similar. On the other hand, the situation is reversed for treatment failure where the rate of dropout is lower in the diclofenac group than in the other two arms.

27. Subsequently, the time to dropout was compared across the three groups (when patients ended the study): the rates of study completion early on (and thus due to drop-out) were very similar across the three groups until 9 months (48.1% for Celebrex; 49.8% for diclofenac; 52.7% for ibuprofen).³⁹ During the period of 9—12 months after study initiation, there was a sharp rise in study completion in all three groups, with the highest rate being in the diclofenac group (38%) as compared to the Celebrex group (29%) and the ibuprofen group (14%).⁴⁰

28. For the specific reason of adverse events, the rates of drop-out over

³⁷ Exhibit 294.

³⁸ Exhibit 294.

³⁹ Exhibit 294.

⁴⁰ Exhibit 294.

time were not that different although the numbers (and percentages) tended to be systematically higher in the diclofenac group at least until 9 months had passed. For example, at 6 months the percentages were 18.5% (Celebrex), 22.2% (diclofenac) and 19.1% (ibuprofen). At 9 months the analogous figures were 21%, 25.9% and 20.8%.⁴¹ These are not, however, dramatic differences.

29. There is no evidence provided that the issue of informative censoring, if it exists, only begins to occur after 6 months of follow-up, the latter being necessary to justify censoring all observations at this point. That is, there is no dramatic increase in censoring due to adverse GI outcomes at 6 months. Even Philip Needleman acknowledges this point and the difficulty in trying to invoke a complex informative censoring argument to demonstrate Celebrex's apparent superiority. He noted in an e-mail to G. Steven Geis: "How can we explain this more simply . . . ? . . . If most of the events in the second 6 mo were celecoxib it is difficult to rationalize because there still were plenty of NSAID patients left (the drop depletion numbers while signif different weren't that profoundly different)."⁴²

30. The second necessary component for informative censoring is that dropouts are at higher risk of the outcome than those remaining under observation. There appears to have been no systematic analysis of whether the occurrence of GI adverse events (that increase the risk of a withdrawal) is associated with a subsequent risk of a CSUGIE. Of course, in part this is presumably because the occurrence of a CSUGIE was not observed once a participant had withdrawn or completed the study (despite the protocol's requirement that drop-outs be followed for two months to assess possible occurrence of CSUGIEs). In this sense, this necessary component of informative censoring is not directly verifiable from the observed data.

31. This concern was well known to CLASS investigators when interpreting the data. For example, Dr. Ethan Weiner, a Pfizer employee clearly accepted this point during his deposition:

Q. And there were other explanations that possibly explained the

⁴¹ Exhibit 294.

⁴² Exhibit 90.

difference between six months and twelve months other than informative censoring; correct?

A. Right. And again, neither could be proven -- none of them could be proven or disproven and it's a matter of opinion, I think, as to which people felt was the most plausible.⁴³

"The argument of informative censoring has its issues as well and is much -- and none of them can be proven or disproven. I think ultimately that's why FDA said we can't use six months or labeling because you can't prove or disprove that what happened in the second six months is informative censoring."⁴⁴

The same view that it was inappropriate to report a 6-month analysis only was also supported by other Pfizer employees including Dr. Zwillich who worked on the CLASS data analysis. In Dr. Leland Loose's deposition, Dr Zwillich's comments are referred to as follows:

"I'm less comfortable with blaming the lack of difference in CSUGIE rates between celecoxib and diclofenac on the higher withdrawal rates on diclo for GIAEs that would have otherwise evolved into GDUs than CSUGIEs, and about half of all CSUGIEs in CLASS (and the literature) were not preceded by warning symptoms. So on that basis, diclo assigned subjects should still have experienced excess events at about half the predicted rate."⁴⁵

Ultimately, the FDA also took considerable issue with the informative censoring argument,⁴⁶ and Pfizer and Pharmacia dropped the 6-month analysis in their subsequent

⁴³ Deposition of Dr Ethan Weiner, September 22, 2010, p. 126.

⁴⁴ Deposition of Dr Ethan Weiner, September 22, 2010, p. 127.

⁴⁵ Deposition of Dr Leland Loose, August 18, 2010, p. 183.

⁴⁶ Deposition of Dr Leland Loose, August 18, 2010, p. 216.

presentations to the FDA.⁴⁷ Thus, it is clear that the 6-month analysis—the fundamental basis of both the primary CLASS publication and previously issued company press releases and pronouncements—was based on subjective and speculative opinions that were disavowed by scientists both within Pfizer and Pharmacia and the FDA.

32. Indirectly, the dropout analysis⁴⁸ considered whether occurrence of a specific adverse event (e.g. abdominal pain, diarrhea etc.) is associated with the risk of dropout (for whatever reason). This was accomplished by examining the length of time after the occurrence of an adverse event until study completion for each individual who experienced a particular adverse event. The evidence here suggests, not surprisingly, that there is some association between experiencing an adverse event—particularly if it is serious—and the likelihood of dropping out of the study. This is supported by a crude survival analysis that curiously appears to assign individuals to fixed adverse event groups as if such individuals were identified at baseline (instead of using a more standard time-dependent covariate analysis).⁴⁹ (This kind of analysis inappropriately assigns early follow-up time on individuals who experience an adverse event later in the study.) Further, this analysis does not deal with the issue of whether those dropping out of the study due to a specific adverse GI event subsequently experience a higher risk of a CSUGIE than similar individuals who remain under follow-up.

33. The main approach to this challenging issue appears to have rested on considering individuals who experienced GI adverse events *but did not drop out of the study*.⁵⁰ The rate of CSUGIEs following the experience of a GI adverse outcome could

⁴⁷ Deposition of Dr Leland Loose, August 18, 2010, p. 226.

⁴⁸ Exhibit 294.

⁴⁹ See, for example, Fisher, L. D. and Lin, D. Y. “Time-dependent covariates in the Cox proportional-hazards regression model,” *Annual Rev. Public Health*, 1990, 20, 145-157.

⁵⁰ See, for example, Final report for a multicenter, double-blind, parallel group study comparing the incidence of clinically significant upper gastrointestinal events between Celecoxib 400 mg bid and ibuprofen 800 mg tid or diclofenac 75 mg bid. The Celecoxib long-term arthritis safety study (CLASS). Document dated May 25, 2000; Section 8.6 (Exhibit 66). See also, H. L. Lu., Statistical Reviewer Briefing Document for the Advisory Committee, NDA20-998, Appendix B.

then be calculated (and compared to those under follow-up who did not suffer such an adverse outcome). This rate was then applied to dropouts from adverse GI outcomes *with the assumption that they represent an equivalent population from those who remained under observation*. This is obviously a very strong assumption and must remain as mere speculation as no study data exists in support, as previously noted. In particular, the two groups of individuals who experienced adverse GI outcomes (those who stayed in and those who dropped-out) clearly differ fundamentally in two ways suggesting that their subsequent risk of a CSUGIE may not be the same: (i) one group dropped out and the others did not, and (ii) those in the study remained under exposure to the drugs in question whereas those who dropped out presumably did not. The latter point shows that this argument suffers from a logical breakdown in causality: the entire basis of calculating a rate of incidence of CSUGIEs and comparing them across treatment groups is that exposure to different drugs *causes* differential risk of CSUGIEs—it is therefore illogical to argue that the risk remains the same after drop-out *given that drug exposure ceases upon drop-out*.

34. The latter point is related to remarks from the FDA Medical Reviewer who noted that “one may in fact consider a self-selected withdrawal from a drug due to a minor adverse event (before experiencing a more severe adverse event such as a CSUGIE) to represent a benefit of the drug’s overall adverse event profile compared to a drug that is ‘silent’ in terms of symptoms until a serious adverse event occurs.”⁵¹

35. Finally, there is no *a priori* reason why differential loss to follow-up should necessarily reflect informative censoring of the kind that necessarily favors diclofenac. While it may be plausible that individuals experiencing adverse gastrointestinal events are at higher risk of both dropping out and experiencing a CSUGIE, it is also plausible that those who drop out for these reasons actually experience fewer CSUGIEs than those who remain in the study after experiencing side effects.

⁵¹ L. Goldkind, “Medical Officer’s Gastroenterology Advisory Committee Briefing Document,” dated June 12, 2000.

Needless to say, there is also the issue of dropouts for other reasons and the fact that they too may have experienced different rates of CSUGIEs in ways that further change the ultimate interpretation. It is not appropriate statistically to focus solely on one cause of dropout.

Statistical Adjustment for Informative Censoring

36. The statistical literature provides some methods for accommodating informative censoring if one is able to model (that is, explain) the dropout process correctly. The most basic approach involves reweighting the data in a time-dependent fashion having estimated accurately the risk of being lost to follow-up for all individuals at all times. No attempt appears to have been made to use these methods seriously, neither in published literature nor other *ad hoc* analyses. The latter approaches the issue by censoring all individuals as soon as they experience an adverse gastrointestinal side effect whether they subsequently dropped out of the study or not. This, of course, throws away some of the observed endpoints rendering the treatment comparisons subject to far more uncertainty.

37. Even if appropriate statistical techniques had been used, they rely entirely on accurate—but unverifiable—assumptions regarding dropouts. “Short of tracking down the missing data, any assumptions made about the missingness process are wholly unverifiable from the data at hand. . . . Therefore, . . . it is important to assess carefully the sensitivity of inferences to a variety of plausible assumptions concerning the missingness process”.⁵² That is, it is statistically inappropriate to assume that informative censoring invalidates all data after 6 months, taking that as a fact without covering the entire range of plausible assumptions in order to draw and report conclusions, including the possibility that Celebrex was truly no safer than diclofenac, for example, with regard

⁵² Molenberghs, G. and Fitzmaurice, G., “Incomplete data: Introduction and overview,” In *Longitudinal Data Analysis*, 2008, Chapman & Hall/CRC Handbooks of Modern Statistical Methods, CRC Press, Boca Raton, Florida.

to reducing the risk of a CSUGIE. In the same vein, consideration of only one source of informative censoring in isolation may miss other sources that could move a final treatment group comparison in either direction. Unfortunately, once the existence of informative censoring is acknowledged and demonstrated, the causality advantages of group comparisons that arise from randomization are substantially weakened. Thus, the results of such an analysis are far more speculative than the Intention-to-Treat approach demanded by the study protocols, comparisons that respect the randomization that provides the fundamental basis for a causal inference in this study.

Failure to Disclose that Celebrex was no better than Diclofenac on any Comparison

38. The protocols for both studies proposed that if a significant difference was detected between Celebrex and the combined NSAID groups, individual comparisons with each of the NSAID treatment groups would then be performed. Leaving aside the fact that the CLASS investigators failed to achieve statistical significance with the grouped comparison, the claimed benefit of Celebrex over NSAIDS was not supported by any comparison of Celebrex with diclofenac⁵³. It is thus disturbing to find claims in the JAMA paper that Celebrex was better than NSAIDs without indicating that any apparent difference essentially reflects differences between Celebrex and ibuprofen. That is, it is statistically misleading to refer to an apparent superiority of Celebrex over NSAIDs in pronouncements without divulging in addition the known information that there was no demonstrable safety deterioration in diclofenac patients, and, in fact, some evidence that diclofenac conveys less risk of gastrointestinal complications.⁵⁴

Aspirin User Analysis

39. As previously noted, the CLASS investigators were unable to achieve a significant comparison for the entire study period, even for the group of patients

⁵³ Exhibit 66, Tables 1-4, pp. 6-7.

⁵⁴ Exhibit 66, Tables 1-4 (pp. 6-7), Table 8.v (pp. 158).

who were not taking aspirin at baseline. For this subgroup, the p-value for the comparison of the celebrex group against the two other groups was 0.185⁵⁵. However they were able to achieve apparent statistical significance in the inappropriate 6-month analysis where they got a p-value of 0.037. Although the protocol contains a vague description of the examination of “potential risk factors such as age and history of peptic ulcer, for the development of a clinically significant UGI adverse event,” no allowance is specifically made for accounting for aspirin use in the study protocols. The protocols⁵⁶ do not describe any form of subgroup analysis based on baseline use of aspirin. If such a *post hoc* analysis is performed, it would be necessary to adjust for multiple comparisons in the computation of a p-value. Undoubtedly, such an adjustment for multiplicity would move the nominal p-value of 0.037 to be larger than 0.05, rendering such a comparison insignificant. Thus the claim that “Celebrex . . . was associated with . . . 64 percent fewer of these serious events among non-aspirin users – a statistically significant difference”⁵⁷ is unsubstantiated by any appropriate statistical analysis of the data. The standard concern regarding *post-hoc* subgroup analyses is raised by the FDA Medical Reviewer who notes that if “one were to post-hoc change the statistical analysis, numerous findings in addition to those identified retrospectively by the sponsor [sic] may be identified and result in multiple adjustments that undermine the statistical validity of any given analysis.”⁵⁸

40. Further, it is misleading to report significant comparisons without noting that significance only applies at the 6-month assessment and fails when using the full study data. Both these opinions are supported by James Witter, a medical reviewer for the FDA, who noted that “the comparisons in the JAMA paper are misleading in that they do not include the entire study results which would have shown that the difference noted

⁵⁵ Exhibit 66, Tables 1--2, p. 6.

⁵⁶ For example, Exhibit 77 (p. 30) and Exhibit 78 (p. 30).

⁵⁷ Exhibit 67.

⁵⁸ L. Goldkind, “Medical Officer’s Gastroenterology Advisory Committee Briefing Document,” dated June 12, 2000.

at 6 months in non-aspirin users was not sustained to the end of the study since celecoxib was not able to “beat” diclofenac even though it demonstrated a favorable result compared to ibuprofen”⁵⁹. It is important to emphasize that in both the full patient group and the subgroup of individuals not taking aspirin, there is no significant difference whatsoever between Celebrex and diclofenac users, even after employing the defendants’ inappropriate *post-hoc* statistical manipulations.

Choice of Outcome: Use of Combined Secondary Endpoint

41. In the protocol,⁶⁰ there is mention of two primary endpoints corresponding to two different definitions of a CSUGIE. Correspondingly, there is an analysis of the alternative more restrictive (FDA) definition of a CSUGIE that is contained in the Final Study Report.⁶¹ These data show--over the full 12-month study period--that patients in the Celebrex group experience a 72% *increased* incidence of such events as compared to diclofenac patients (17 vs. 5, that is, 0.43% vs. 0.25% of the respective study groups). In this analysis, Celebrex is only marginally better than ibuprofen (0.45%), a clearly insignificant comparison. With this more restrictive definition of a CSUGIE, there is absolutely no benefit from Celebrex compared to the two NSAIDS, and in fact a substantial deterioration when compared to diclofenac. This information is not reported in the publication.

42. However, the CLASS investigators do report another endpoint comparison that is not noted in the secondary objectives section of the protocols that does not refer to treatment comparisons according to broader endpoints. The protocol states that “symptomatic UGI ulcers documented by endoscopy or UGI barium x-ray with no evidence of perforation, bleeding or obstruction will be categorized and summarized

⁵⁹ Affidavit of Howard R. Phillips, Exhibit D.

⁶⁰ Exhibit 77 (p. 30); Exhibit 78 (p. 29).

⁶¹ Exhibit 66, Table 8.v (p.158).

separately”⁶². In their instructions to authors, the *Journal of the American Medical Association* clearly states that “The primary study outcome measurement(s) should be indicated as planned before data collection began.”⁶³ Thus, the use of any such expanded endpoint in a *post-hoc* analysis would require a multiplicity adjustment to p-values at the very least. As it happens, the p-value obtained through a comparison of CSUGIE/GDU incidence is 0.023⁶⁴ for the 6-month analysis and 0.04 for the entire study period. These p-values again would be rendered insignificant by appropriate multiplicity adjustments. Conservatively, there are already four different treatment comparisons associated with two different endpoints at two different time points (complete data and 6 month analysis), suggesting that p-values might be appropriately multiplied by 4 using a standard Bonferroni adjustment for multiple testing.⁶⁵

Summary

43. In any randomized clinical trial, adhering to the protocol is a critical task as the latter is designed to protect the analysis and interpretation from bias and spurious results. In the case of the CLASS trial, the investigators failed in this regard in multiple ways including (i) discarding all data after 6 months of observations, (ii) focusing on a *post-hoc* subgroup analysis based on aspirin use, (iii) emphasizing a *post-hoc* secondary endpoint comparison, and (iv) disregarding the absence of a safety advantage of Celebrex compared to diclofenac. None of the investigators’ treatment comparison allowed for the multiplicity of their analyses in computing or reporting their nominal p-values. In all four regards, the resulting analyses were therefore subject to bias and were clearly misleading. Ultimately, I am compelled to agree with the defendant G. Steven Geis, one of the primary CLASS investigators, that the study unfortunately turned

⁶² Exhibit 77 (p. 30) and Exhibit 78 (p. 29).

⁶³ Exhibit 259 (p. 097).

⁶⁴ Exhibit 66, Table 3 (p. 7).

⁶⁵ D’Agostino, R. and Russell, H. K., “Multiple endpoints, P level procedures,” *Encyclopedia of Biostatistics*, 2005, Joh Wiley & Sons, New York, New York.

out to be unsuccessful in meeting its objective⁶⁶. If further exploratory analyses were reported they should have been noted as such and clearly indicated as being speculative. Without question, an additional study would have been required to confirm such speculative opinions. These views are supported and summarized in an editorial by Juni et al.⁶⁷ who noted that the “protocols of these trials differed markedly from the published paper in design, outcomes, duration of follow up, and analysis.” They continued to point out that the “authors’ explanations for these serious irregularities were inadequate” failing to “justify the post hoc changes in design, outcomes, and analysis,” providing “an unconvincing explanation for considering the six month follow up only,” and concluding “Publishing and distributing overoptimistic short term data using post hoc changes to the protocol, while omitting disappointing long term data of two trials, which involved large numbers of volunteers, is misleading.”

44. I reserve the right to supplement this report if new or significantly modified quantitative information is provided at any point, and as I review other related documents.



May 13, 2011

Nicholas P. Jewell, Ph.D.

⁶⁶ Email from George S. Geis to James B. Lefkowitz, March 21, 2000, Exhibit 80, “We then show how all these other elements made the study unlikely to be successful,” the other factors being imbalance of early withdrawals, characteristic of early withdrawals, aspirin use, etc.

⁶⁷ Juni, P., Rutjes, A. W. S., and Dieppe, P. A., “Are selective COX 2 inhibitors superior to traditional non steroidal anti-inflammatory drugs?” *British Medical Journal*, 2002, 324 1287-1288, Exhibit 32.

EXHIBIT A

NICHOLAS PATRICK JEWELL, PH.D.

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Berkeley, CA 94720
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jewell@berkeley.edu**

EDUCATION

Postdoctoral Harkness Fellow at *Stanford University*, Department of Statistics and Division of Biostatistics (July 1977-June 1978).

Postdoctoral Harkness Fellow at *University of California, Berkeley*, Departments of Mathematics & Statistics (September 1976-June 1977).

Ph.D. in Mathematics from *University of Edinburgh* (June 1976).

B.Sc. (1st Class Honors) in Applied Mathematics from *University of Edinburgh* (June 1973).

EXPERIENCE

July 1987-present

PROFESSOR

University of California, Berkeley: Division of Biostatistics, School of Public Health
Department of Statistics

January 2011-present

CHAIR

University of California, Berkeley: Division of Biostatistics, School of Public Health

November 2009

VISITING PROFESSOR- KYOTO UNIVERSITY, JAPAN

September 2007-September 2008

VICE PROVOST – ACADEMIC PERSONNEL

Office of the President, University of California, Oakland, CA

April 2007 – May 2007

FELLOW

Bellagio Study Center, Italy: The Rockefeller Foundation

August 2000-August 2007

CHAIR

University of California, Berkeley: Graduate Group in Biostatistics, School of Public Health

December 2004-September 2006

DIRECTOR

Center for Computational Biology, University of California, Berkeley

January 2003-January 2007

CHAIR

University of California, Berkeley: Graduate Group in Computational and Genomic Biology

September 1994 - June 2000

VICE PROVOST

University of California, Berkeley: Office of the Chancellor

November 1997 - August 1998

INTERIM VICE CHANCELLOR, CAPITAL PROJECTS

University of California, Berkeley: Office of the Chancellor

January 1986-November 1994

CO-CHAIR

University of California, Berkeley: Group in Biostatistics, School of Public Health

January 1990-July 1990

VISITING PROFESSOR

Oxford University: Department of Statistics

July 1983-July 1987

ASSOCIATE PROFESSOR

*University of California, Berkeley: Division of Biostatistics, School of Public Health
Department of Statistics*

September 1981-June 1983:

ASSISTANT PROFESSOR

University of California, Berkeley: Division of Biostatistics, School of Public Health

September 1979-August 1981:

ASSISTANT PROFESSOR

Princeton University: Department of Statistics

UNDERGRADUATE REPRESENTATIVE

Princeton University: Department of Statistics

Supervision of undergraduate program, advising on courses for all majors;

DIRECTOR OF STATISTICAL LABORATORY

Princeton University

Administered statistical consulting services for all departments on campus.

September 1979-September 1981:

PRINCIPAL STATISTICAL INVESTIGATOR

New Jersey Department of Health:

Statistical Investigator on research grant to study birthing facilities in the state.

June 1978-August 1979

RESEARCH FELLOW

University of Edinburgh: Medical Computing and Statistics Unit

LECTURER

University of Edinburgh: Department of Statistics.

July 1977-June 1978

STATISTICAL CONSULTANT

Stanford University: Division of Biostatistics:

Provided statistical consulting for several biomedical projects.

OTHER APPOINTMENTS

2010-present

MEMBER

Board of Scientific Counselors, National Toxicology Program, NIEHS

2007-2010

MEMBER

Board of Scientific Governors, Mathematical Biosciences Institute, Ohio State University

1993-1995

MEMBER

Agency for Health Care Policy and Research: Health Services Research Review Committee (Study Section)

1993-1996

MEMBER

National Academy of Sciences: Committee on National Statistics

1994-1996

MEMBER

National Academy of Sciences: Committee on Theoretical and Applied Statistics

1987-present

PROFESSOR

University of California, San Francisco: Department of Epidemiology and Biostatistics

PERSONAL

Date and Place of Birth: September 3, 1952; Paisley, Scotland

U.S. Citizen

GRANTS

1. Principal investigator on Scottish Home and Health Department Grant (June 1978-August 1979): Project was to establish and maintain a statistical consulting service for biomedical researchers in Edinburgh, Scotland.
2. Principal Investigator on NSF Grant on "Canonical Analysis of Time Series"; awarded July 1980-July 1982.
3. Co-investigator on NIMH grant: "FEHBP: The impact of changes in mental health benefits," Grant #MH37313. 8/1/82-9/30/86. Annual direct costs \$150,000.
4. Co-investigator on DHHS/NIH grant: "Infant feeding and serum cholesterol," Grant #HD18593. 9/1/83-8/31/85. Annual direct costs: \$76,166.
5. Co-investigator on NIA grant: "Living arrangement and dietary status," Grant #1R01AG05284-01A1. 2/1/86-1/31/89. Annual direct costs: \$148,000.
6. Co-investigator on NIA grant: "Living arrangements, dietary status: US adults 1971-1980," Grant #1R01AG05284. 2/1/86-1/31/89. Annual direct costs: \$132,000.
7. Co-investigator on NIA grant: "Risk factors for hip and Colles fractures," Grant #1R01AG05407-01A1. 2/1/86-1/31/92. Annual direct costs: \$368,000.
8. Co-investigator on NIAID contract: "The natural history of acquired immune deficiency syndrome (AIDS) in homosexual men," Contract #NO1A13259. 10/1/87-10/31/95. Annual direct costs: \$1,628,000.
9. Co-Principal Investigator on NIDA grant: "Statistical methodology for study of the AIDS epidemic," Grant #DA04722. 9/30/87-8/31/95. Annual direct costs: \$611,000.
10. Co-investigator on NIA grant: "Living arrangements, diet and survival of older US adults," Grant #1R37AG0538404. 2/1/89-1/31/91. Annual direct costs: \$101,301.
11. Co-investigator on NIA grant: "Epidemiology of chronic disease in the oldest old," Grant #01AG07425. 6/30/89-11/30/91. Annual direct costs: \$388,977.
12. Principal Investigator on NIAID grant: "Statistical methodology in the natural history of AIDS," Grant #1R01AI29162. 9/30/89-4/30/93. Ann. direct costs: \$93,228.
13. Principal Investigator on NIAID grant: "Statistical issues in AIDS research," Grant #1R01AI33831. 12/01/92-11/30/96. Annual direct costs: \$166,364.
14. Principal Investigator on SIMS grant: "Statistical methodology for the study of the AIDS epidemic," Grant #M2454. 6/01/96-8/31/96. Annual direct costs: \$150,000.
15. Principal Investigator on NIH grant: "Statistical methods for complex HIV cohort studies," Grant # R01 AI55085001. 09/30/02-09/01/06. Annual direct costs: \$416,807.
16. Co-Investigator on NIH grant: "Children's Environmental Health Center Grant: Exposures and Health of Farmworker Children in California," Grant # 1P50 ES09605-03 - NIEHS 9/01/98 - 03/31/05 Annual direct costs: \$1,969,038; Grant# R 826 709011-02/03 -- EPA 9/01/98 - 03/31/05 Annual direct costs: \$132,000.

17. Co-Investigator on NIH grant: "Children's Environmental Health Center Grant: Exposures and Health of Farmworker Children in California," Grant # 2P01 ES009605-07 NIEHS 11/01/03 - 10/31/08 Annual direct costs: \$567,980; Grant# RD-83171001-07 EPA 11/01/03 - 10/31/08 Annual direct costs: \$465,985.

18. Principal Investigator on NIH grant: " Statistical methods to study the epidemiology of HIV and other diseases," Grant # R01 AI070043. 05/15/07-04/30/11. Annual direct costs: \$317,961

19. Principal Investigator on NIH grant: " Statistical techniques for complex environmental epidemiological studies," Grant # R01 ES015493. 06/15/07-03/31/11. Annual direct costs: \$284,089

20. Principal Investigator on NSF Grant: "UC Alliance for Graduate Education and the Professoriate (AGEP) Phase II," Grant # HRD-0450366 9/1/2007-9/1/2008

FELLOWSHIPS

1. Miller Professorship, U.C. Berkeley, Fall 2004
2. Burroughs-Wellcome Research Fellowship, 1990
- 2 Regents Junior Faculty Fellowship, U.C. Berkeley, Summer, 1982.
3. Harkness Fellowship, August 1976 to June 1978.
4. Thouron Fellowship at University of Pennsylvania, 1976.
5. Sir David Baxter Scholarship in Physical Sciences at Univ. of Edinburgh, 1973-1976.
6. Carnegie Scholarship from the Carnegie Fund, 1971.

AWARDS AND HONORS

1. Keynote Speaker, International Chinese Statistical Association, 2009 Applied Statistics Symposium
2. Fellow, American Association for the Advancement of Science (AAAS), 2007
3. An award for one of the Top Seismic Projects of the Twentieth Century for the model Disaster Resistant University Program at the University of California, Berkeley (which I launched and led), 2006, from the Applied Technology Council
4. Alfred E. Alquist Award, 2005, for the University of California, Berkeley Disaster Resistant University program and SAFER (both of which I launched and led) from the California Earthquake Safety Foundation, also recognized UC Berkeley's leadership in demonstrating state-of-the-art risk management for universities across the country.
5. Snedecor Award, Committee of Presidents of the Statistical Societies, 2005; awarded biannually and "honors an individual who was instrumental in the development of statistical theory in biometry". The award is associated with the best publication in biostatistics in the previous three years
6. Distinguished Teaching Award, School of Public Health, Univ. of California, Berkeley, 2004.
7. Director's Award from James Lee Witt, Director, Federal Emergency Management Agency, "For extraordinary leadership and vision in implementing strategies that enhance the disaster resistance of the University of California, Berkeley and universities throughout America", 2000.
8. Dean's Appreciation Award, School of Social Welfare, UC Berkeley, 2000.
9. Fellow, Institute of Mathematical Statistics, 1996.

10. Fellow, American Statistical Association, 1991.
11. Keasbey Memorial Foundation Prize, 1973.
12. Distinguished Medal in Applied Mathematics, 1973.
13. Distinguished Medal in Logic and Philosophy of Science, 1971.
14. Ramsay Memorial Prize in Astronomy, 1970.
15. Distinguished Medal in Mathematics, 1970.

Prizes 11-15 were awarded by University of Edinburgh.

PROFESSIONAL MEMBERSHIPS

Committee of Presidents of Statistical Societies (COPSS)

Member, 1991-1992

COPSS Award Committee, 1997-1999.

Institute of Mathematical Statistics: Fellow

Treasurer, 1985-1988.

Management Committee for Current Index of Statistics, Member (1985-88)

Nominating Committee, Member (1988-89)

American Statistical Association: Fellow

President (2010-11), President-Elect (2009-10), Section on Statistics in
Epidemiology

Committee for Award for Outstanding Statistical Application, 1994-1997 (Chair
95-97)

San Francisco Bay Area Chapter:

President, 1985-86

President-elect, 1984-85

Vice-president (Biostatistics), 1982-1984

Chair, Nominating Committee for District 7 Representative, 1985

Nominating Committee, Chair (1987), Member (1988, 1991)

Biometric Society:

Editorial Advisory Committee (1994-present)

Western North American Region

Past-President, 1992

President, 1991

President-Elect, 1990

Student Paper Competition, Judge 1986-87; Chair 1988.

Visiting Lecturer Program in Statistics, 1984-

Selected by Committee of Presidents of Statistical Societies

OTHER HONORS

1. *The International Journal of Biostatistics*, Founding Editor (2004-present)
2. *Statistical Applications in Genetics and Molecular Biology*, Senior Editor (2002-present)
3. *Lifetime Data Analysis*, Editor (1995-99); Associate Editor (1999-2002)
4. *Biometrika*, Associate Editor (1998-present)
5. *Journal of the American Statistical Association, Theory and Methods*, Assoc. Ed. (1989-96)
6. *Journal of the American Statistical Association, Applications*, Associate Editor (1995-96)
7. *International Statistical Review*, Associate Editor (1988-96)
8. *The American Statistician*, Associate Editor (1987-90)
9. *Statistical Science*, Associate Editor (1995-96)
10. *Annals of Statistics*, Associate Editor (1995-96)

& Books

* Refereed publications

+ Invited paper presented at professional meeting

Contributed paper presented at professional meeting

** Technical Report, Research grant/contract report

@ Letters to the Editor

% Chapter in book

NICHOLAS PATRICK JEWELL

PUBLICATIONS

- ** 1. N. P. Jewell, "An extension of the concept of vanishing mean oscillation," Technical report, University of Edinburgh, November, 1975.
- * 2. N. P. Jewell and A.M. Sinclair, "Epimorphisms and derivations on $L_1(0,1)$ are continuous," *Bull. of London Math. Soc.* 8, 1976, 135-139.
- + 3. N. P. Jewell, "Prime ideals and automatic continuity of derivations," Invited paper presented at Science Research Council Meeting on Functional Analysis, Leeds, England, June 1976.
- * 4. N. P. Jewell, "The continuity of module and higher derivations," *Pacific Journal of Mathematics*, 68, 1977, 91-98.
- * 5. N. P. Jewell, "The existence of discontinuous model derivations," *Pacific Journal of Mathematics*, 71, 1977, 465-475.
- * 6. N. P. Jewell and A.M. Davie, "Toeplitz operators in several complex variables," *Journal of Functional Analysis*, 26, 1977, 356-368.
- * 7. N. P. Jewell, "Multiplication by the coordinate functions on the Hardy space of the unit sphere in C_n ," *Duke Journal of Math*, 44, 1977, 839-851.
- + 8. N. P. Jewell, "Multiplication by the coordinate functions on the sphere in C_n and the Bergman spaces," Invited paper presented at the Summer Meeting of the American Mathematical Society, August, 1977; Abstract in *Notices of the American Mathematical Society*, 24(5), 1977, A-488.
- * 9. N. P. Jewell and A. Lubin, "Systems of commuting weighted shifts and analytic function theory in several variables," *Journal of Operator Theory*, 1, 1979, 207-223.
- * 10. N. P. Jewell and S. Krantz, "Toeplitz operators and related function algebras on certain pseudo-convex domains," *Transactions of the Amer. Math. Soc.*, 252, 1979, 297-312.
- * 11. S. Axler, I. Berg, N. P. Jewell and A. Shields, "Approximation by compact operators and the space $H^\infty + C$," *Annals of Mathematics*, 109, 1979, 197-312.
- * 12. P. Bloomfield, J. Carmichael, G. Petrie, N. P. Jewell and G. Crompton, "Comparison of salbutamol given intravenously and by intermittent positive pressure breathing in life-threatening asthma," *British Medical Journal*, 1, 1979, 848-850.

- + 13. N. P. Jewell, "Straight line fitting with heteroscedastic errors in both variables," Paper presented at the International Society of Clinical Biostatistics, Brussels, Belgium, April, 1979.
- ** 14. N. P. Jewell and G.M. Raab, "Consistent estimation of variance parameters from many small samples with different means," Technical Report No. 159, Series 2, Department of Statistics, Princeton University, October 1979, 29 pp.
- * 15. N. P. Jewell "Fredholm Toeplitz operators on strongly pseudoconvex domains", *Studia Math*, 68, 1980, 25-34.
- * 16. S. Axler, N. P. Jewell and A. Shields, "The essential norm of an operator and its adjoint," *Transactions of the American Mathematical Society*, 261, 1980, 159-167.
- * 17. N. P. Jewell, "Toeplitz operators on the Bergman spaces and in several complex variables," *Proceedings of the London Mathematical Society*, 41, 1980, 193-216.
- * 18. R. Strange, J. Reid, D. Holton, N. P. Jewell and I. Percy-Robb, "The glyceryl [14C] tripalmitate breath test: a reassessment," *Clinica Chimica*, 103, 1980, 317-323.
- # 19. N. P. Jewell and G. M. Raab, "Consistent estimation of variance parameters," Paper presented at Annual Meeting of the American Statistical Association, August 1980.
- ** 20. N. P. Jewell and P. Bloomfield, "Partial characterizations of completely nondeterministic stochastic processes," Technical Report No. 180, Series 2, Department of Statistics, Princeton University, November 1980, 20 pp.
- ** 21. N. P. Jewell, "Mixtures of survival distributions," Technical Report No. 200, Series 2, Department of Statistics, Princeton University, December 1980, 21 pp.
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- # 24. N. P. Jewell and P. Bloomfield, "Some problems on $L_2(w)$ and outer functions connected with stochastic processes," Paper presented at Annual Meeting of the American Mathematical Society, January 1981.
- % 25. N. P. Jewell, "Some multiple Q-Q plotting procedures," in *Modern Data Analysis*, eds. R.L. Launer, A.F. Siegel, Academic Press, New York, 1982, 13-35.
- * 26. N. P. Jewell, "Mixtures of exponential distributions," *Annals of Statistics*, 10, 1982, 479-484.
- # 27. N. P. Jewell, "Jackknifing estimates of the odds ratio," Paper presented at Spring Meeting of the Biometric Society, June 1982; Abstract in *Bulletin of the Institute of Mathematical Statistics*, 11(4), 1982, 191.

- ** 28. N. P. Jewell and A. Kyllingstad, "Design considerations for a study of alternative birthing sites," Contract report for the New Jersey State Department of Health, 1982.
- * 29. N. P. Jewell and J.P. Romano, "Coverage problems and random convex hulls," *Journal of Applied Probability*, 19, 1982, 546-561.
- # 30. N. P. Jewell and J. Romano, "The probability that a random convex hull contains a fixed set," Paper presented at Annual Meeting of the American Statistical Association, August 1982; abstract in *Bulletin of the Institute of Mathematical Statistics*, 11(4), 1982, 252.
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- + 40. N. P. Jewell, "Some open problems in function theory related to the characterization of stochastic processes," Invited paper presented at NATO/LMS Advanced Study Institute, University of Lancaster, England, July 1984.
- * 41. C.A. Watts, R.M. Scheffler and N. P. Jewell, "Demand for outpatient mental health services in a heavily insured population: The case of BC/BS FEHBP," *Health Services Research*, 21, 1986, 267-289.
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EXHIBIT B

Alaska Electrical Pension Fund, et al. v. Pharmacia Corporation, et al.
No. 03-1519 (AET)

EXHIBIT B

1. Deposition Transcript of M. Michael Wolfe, dated December 18, 2006, and Wolfe Exhibits 1-16.
2. Deposition Transcript of Catherine DeAngelis, dated January 12, 2007, and Exhibits 17-42.
3. Deposition Transcript of Rennie Drummond, dated January 18, 2007, and Exhibits 43-50.
4. Deposition Transcript of Lawrence Goldkind, dated May 2 and May 3, 2007, and Goldkind Exhibits 1-9.
5. Deposition Transcript of Gerald Faich, M.D., dated July 27, 2010, and Exhibits 51-76.
6. Deposition Transcript of Kenneth Verburg, dated August 6, 2010, and Exhibits 77-106.
7. Deposition Transcript of Leland Loose, dated August 18, 2010, and Exhibits 107-138.
8. Deposition Transcript of Lee Stuart Simon, dated September 16, 2010, and Exhibits 139-159.
9. Deposition Transcript of Peter Juni, dated September 21, 2010, and Exhibits 160-161 and Defendants' Exhibits 1-15.
10. Deposition Transcript of Ethan Weiner, dated September 22, 2010, and Exhibits 162-190.
11. Deposition Transcript of Fred Silverstein, dated September 29, 2010, and Exhibits 191-212.
12. Deposition Transcript of Samuel Zwillich, dated October 12, 2010, and Exhibits 213-217.
13. Deposition Transcript of Emilio Arbe, dated October 19, 2010, and Defendants' Exhibits 16-18.
14. Deposition Transcript of Goran Ando, dated November 11, 2010, and Exhibits 218-230.
15. Deposition Transcript of Philip Needleman, dated December 7, 2010, and Exhibits 231-247.
16. Deposition Transcript of G. Steven Geis, dated December 10, 2010, and Exhibits 248-275.
17. Deposition Transcript of Vibeke Strand, dated December 14, 2010, and Exhibits 276-286.
18. Deposition Transcript of Robert Makuch, dated December 21, 2010, and Exhibits 287-296.

19. Deposition Transcript of Mitchell Gandelman, dated January 20, 2011, and Exhibits 297-326.
20. Deposition Transcript of Michael Friedman, dated February 1, 2011, and Exhibits 327-333.
21. Deposition Transcript of Carrie Cox, dated February 9, 2011, and Exhibits 334-375.
22. Deposition Transcript of Fred Hassan, dated February 22, 2011, and Exhibits 376-412.
23. Deposition Transcript of Mona Wahba, dated February 27, 2011, and Exhibits 413-429.
24. Deposition Transcript of Edward Gramling, dated February 28, 2011, and Exhibits 430-431.
25. Deposition Transcript of William Zhao, dated April 11, 2011, and Exhibits 432-443.
26. Affidavit of Howard R. Philips, dated October 18, 2010, and Attachments A-D.

EXHIBIT 73

From: _HASSAN, FRED [PNU/PNU]
Sent: Tuesday, April 25, 2000 8:18 PM
Subject: Talking About Our Business: Q1 Earnings Release

Talking About Our Business: Q1 Earnings Release of Pharmacia
Corporation - 2000 April 25

Dear Colleagues,

You may have seen the earnings release for our first quarter as the new Pharmacia Corporation, which was issued earlier today.

The 27 percent increase in earnings per share over the same period last year for our two former companies is on track with the expectations that were created during our roadshow earlier this year.

This also gives us a good foundation for achieving our longer-term goal of 20 percent annual compounded growth through 2002. So we are off to a good start.

As we told analysts during our regular quarterly conference call this morning, there were two key factors behind our performance.

The first was the exceptional strength of our key products. And the second was the speed and efficiency of our merger and integration process.

The fact that we are achieving perhaps the fastest and smoothest merger on record in our industry has been enormously important to our performance. We are avoiding the symptoms of "merger devaluation syndrome," such as the distraction of our sales forces from their work, and culture clashes between organizations.

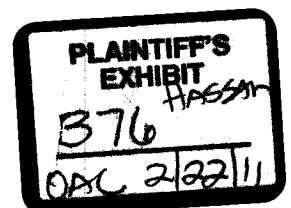
Everyone at Pharmacia Corporation can take satisfaction in the mature, customer-focused manner in which we have handled our integration process thus far. Thanks to the commitment of all of our employees, we have maintained our business momentum and our business focus. Mergers are never easy, and we truly appreciate your support during this process.

In the meantime, we are already seeing some of the enormous power that we will unlock in the new company through our products and our pipeline.

Only in the last week, we had two important wins at the FDA. Our cancer treatment Camptosar was approved for first-line use in treating colorectal cancer -- the first new first-line treatment for this devastating disease in 40 years.

And Zyvox, our revolutionary antibiotic, was also approved by the FDA, with a positive label. This label will help to assure that Zyvox is used early and appropriately for serious hospital infections.

During our conference call with the investment community, we particularly emphasized the exciting topline data of a new study for our leading product, Celebrex.



This extensive study, which has just been completed, demonstrates important safety advantages for patients of Celebrex versus other older treatments for arthritis. For example, Celebrex convincingly reduces the risk of gastrointestinal problems, including ulcers and bleeding that can be caused by compounds like ibuprofen.

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Indeed, Merck has had to write to investigators about Vioxx safety concerns.

The results of this study on Celebrex will be a major asset. In particular, they will strongly enhance our competitive advantage as we begin over the next 18 months to launch Celebrex in Europe, where we have VERY exciting growth opportunities.

Given all these positive factors, you may wonder why our stock has dropped somewhat after our earnings release.

The main reason is that while our performance was what we expected, we have not yet hit our full stride for this year. Investors are concerned that we did not yet deliver the mid-teens prescription pharmaceutical sales growth that we are anticipating for 2000. They are also concerned that our Ag business showed slightly negative growth in this quarter. These, however, are very short-term concerns. Over the course of this year I look forward to achieving mid-teens x sales growth, as we have expected.

As for our Ag business, we know this is volatile due to seasonal conditions inherent in the industry, and we look to a counter-balancing performance later in the year.

So we should all continue to feel VERY confident that with continued hard work, and executional excellence, we will achieve our growth goals and meet our shareowners' expectations for this year and the coming years.

Even after the stock drop today, we should all be pleased to note that PHA is up 52 percent on a year-to-date basis, the number one growth stock compared to our peer companies.

Finally, I would like to address briefly the coverage that many of you will have seen in the New York Times regarding Xalatan.

This story conveys the impression that our company has profited unfairly from early outside research, and that our pricing puts Xalatan out of reach of patients who may need it.

In fact, we should all feel very proud of what our company has achieved with Xalatan. Through our R&D, and hundreds of millions of dollars of investment, we took an early and unproven compound and transformed it into a medical miracle for the treatment of glaucoma. With Xalatan, we are saving thousands upon thousands of patients from blindness -- at less cost per year than an out-of-town subscription to the New York Times.

Where criticism should rightly be directed is at the U.S. government program for the healthcare of older and poorer citizens. The Medicare program is outmoded and out of date, and therefore does not cover most outpatient drugs. This leaves a small but important group of citizens uncovered by an adequate safety net.

You should know that our company has been a driving force in seeking overall reform of the U.S. Medicare program. We have also proposed a creative and pragmatic means of covering those most in need at very low cost to taxpayers, a proposal which is finding widespread support among many members of the U.S. Congress. I personally have been deeply involved in this initiative.

As a company, we also have a program that we fund ourselves to help low-income patients with the cost of our treatments.

In sum, the story of Xalatan is one that does great credit to our people and to our company. We can and should feel good about it.

In the meantime, I would encourage those of us who are U.S. citizens to write to our representatives in Congress to call for effective overhaul of the Medicare program to provide a strong out-patient drug benefit, while preserving the U.S. free enterprise system. That is the way to assure that Xalatan and other important medications are available to all the people who need them.

Fred Hassan, Chief Executive Officer

EXHIBIT 74

From: HASSAN, FRED [PNU/PNU]
Sent: Thursday, June 22, 2000 1:21 AM
Subject: Talking About Our Business -- June 21, 2000

Talking About Our Business: Growth Through Product and
Customer Relationships

2000 June 21

To All Pharmacia Employees

Dear Colleagues,
In my last message, I talked about the success factors that
are making our new oncology franchise a powerful driver toward
our company goals of first-tier, best-managed status. You may
recall that I identified a burning focus on meeting customer
and patient needs through our products as the most important
factor of all.

Today, I would like to address two other product and customer
relationships: Celebrex and our emerging women's health care
business area.

Celebrex is critical to the success of our company. It is our
leading engine of growth.

As you know, Celebrex had the most successful launch in
industry history. Since that launch in January 1999, more
than 8 million patients in the United States alone have
benefited from this special drug. Celebrex combines
effectiveness against inflammation and pain with exceptional
safety, including a much lower incidence of gastrointestinal
problems than conventional treatments. This is especially
important for people who suffer the chronic pain of arthritis,
and require long-term treatment.

Through Celebrex, we are having a dramatic, positive impact
on the lives of millions of patients - and driving the 20
percent or higher annual compounded earnings growth that we
have promised our shareowners.

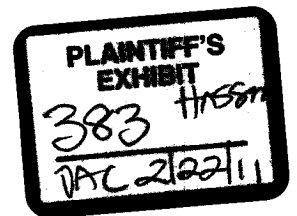
During our roadshow in February, we had estimated peak annual
sales of Celebrex as being potentially more than \$3 billion. We
are already at \$2 billion - and now that we have set our sights
higher in Europe, I believe we can more than double our current
\$2 billion level. Celebrex is targeted to become one of the
biggest-selling pharmaceutical products in the world. And we
have patent exclusivity through 2013.

Celebrex is being challenged by another COX-2 inhibitor from
Merck. In fact, Celebrex is only now approaching the monthly
share of new prescriptions that it had achieved in the United
States, before this competitor appeared in the market.

While both these new coxib products are making non-selective
NSAIDs obsolete thanks to their safety and tolerability profiles,
the emerging data reinforces our belief that Celebrex is the
better product.

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Non-Resp.

Safety and tolerability for Celebrex has recently been validated by one of the largest outcomes trial ever conducted in this category. Doctors and patients can now use Celebrex with the confidence that it has been fully studied under real-world conditions.

One of our guiding strategies is to operate through "customer channels." Our customer channels for Celebrex currently are primary care physicians, as well as specialists who treat arthritis. We need to focus intently on identifying THEIR needs and priorities, and those of their patients. We must demonstrate to them the superiority of Celebrex. For example, efficacy and safety are very high priorities for users of this kind of medication, and the efficacy and safety of Celebrex are competitive advantages that we must use to the fullest.

By thinking in terms of customer channels, we also focus on new opportunities to sell more products to the same customer, increasing the value of each call by our sales representatives. For example, thanks to our merger, many of our primary care representatives in the United States can now sell both Celebrex and Detrol (for overactive bladder), instead of just one or the other. This increases the sales of BOTH products.

The critical linkage in our customer relationships is through our sales representatives. We are counting on them to be world class and to outperform our competitors - in the quality of their personal relationships with our customers. Being best in selling skills is very important. Even more important is passion. With Celebrex and Detrol, for example, we will beat our competition and expand our leadership through the passion of our commitment to our customers and to our promoted products.

Earlier this month, we took an important step in another area: launching a women's health care business. In this case, the core customer channel is the OB-GYN and other primary care physicians are important supporting channels.

Women's health is one of the important opportunities for growth for our company. As with oncology, we once had an important position in this area in the former Upjohn Company, but we lost this position through a lack of sustained management commitment and merger disruptions.

What is exciting is that today we have one of our industry's best arrays of products for this area. We have just launched a new product, Activella, which gives us a special position in the fast-growing hormone replacement therapy market. Activella is a soy-derived compound that offers women a new alternative to existing products.

In addition to Depo-Provera, our existing injectable contraceptive that is administered four times a year, we are preparing to introduce a new injectable product that will be branded as Lunelle. Lunelle will be the first monthly birth control option for American women when it becomes available later this year.

We also have Vagifem, a treatment for atrophic vaginitis

with an innovative, tablet-based delivery system; as well as Flagyl ER and Cleocin Vaginal Ovules, both products for bacterial vaginosis.

Just as we set out three years ago to rebuild our presence in oncology, our women's health team now has the challenge and the opportunity to rebuild this area into a competitive strength for Pharmacia.

Once again, it will come down to world-class focus on our customers and patients, and to excellence in execution. It is clear that women seek effective alternatives to existing products, and we are now positioned to provide them and their physicians with a unique array of effective alternatives.

Two key ingredients for success will be communicating this message, and then delivering on our promise. The third will be business STAMINA - to overcome obstacles and stay the course. We must not forget that it took three years of very hard work to build our oncology franchise from an "also-ran" into a contender for global leadership.

With the same kind of hard work, we can expect to see our women's health care unit grow into the size of business, and strength of customer relationships, that merits "franchise" status in Pharmacia Corporation.

Passion, commitment to the customer, and business stamina are hallmarks of the new Pharmacia. These attributes are part of what makes us the most exciting company in our industry.

Sincerely,

Fred Hassan
Chief Executive Officer

EXHIBIT 75

From: LEFKOWITH, JAMES B. [PHR/1825]
Sent: Saturday, May 26, 2001 8:15 PM
To: VERBURG, KENNETH M [PHR/1825]; GEIS, GEORGE S. [PHR/1825]
Subject: CBX-0375957_RE: CLASS

This looks fine to me. I have no suggestions. It should summarize the history and issues for Temple and he can always use the White Paper for details.
Jim

-----Original Message-----

From: VERBURG, KENNETH M [PHR/1825]
Sent: Friday, May 25, 2001 8:06 PM
To: GEIS, GEORGE S. [PHR/1825]; LEFKOWITH, JAMES B. [PHR/1825]
Subject: CLASS

Guys, attached is the draft document for FDA. Fred Begley boiled down her notes from previous meetings to the following 5 topics which she thinks will be transmitted to Temple:

1. Combined endpoint is post-hoc and assigning p-values is not defensible.
2. Non-ASA patient data is data-dredging to find positive data.
3. Placement of AE data
4. There is a lack of consistency in results between celecoxib and ibuprofen and celecoxib and diclofenac, therefore message to the prescriber is confusing.
5. What comparative claims will be made.

Jim had already nicely covered the first three points in his document, and the fifth point really goes to commercial to describe. That leaves #4 ... never really easy to answer/explain even to ourselves. I got something down on paper for this point but needs work. Please modify as you see fit.

Ken

<< File: CLASS FDA response 052501.doc >>

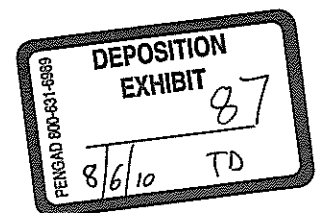


EXHIBIT 76

Edward Gramling

February 28, 2011

<p>1 UNITED STATES DISTRICT COURT 2 DISTRICT OF NEW JERSEY 3 ----- 4 ALASKA ELECTRICAL PENSION FUND, 5 et al., On Behalf of Themselves 6 and All Others Similarly Situated, 7 Plaintiffs, 8 -against- No. 03-1519 (AET) 9 (Consolidated) 10 PHARMACIA CORPORATION, et al., 11 Defendants. 12 ----- 13 February 28, 2011 14 10:44 a.m.</p> <p>Deposition of EDWARD GRAMLING, taken by Plaintiffs, pursuant to Notice, held at the offices of Cadwalader, Wickersham & Taft LLP, 590 Madison Avenue, New York, New York, before Lisa Rosenfeld, a Shorthand Reporter and Notary Public within and for the State of New York.</p>	<p>1 2 THE VIDEOGRAPHER: The time is 10:44 3 a.m. This begins tape number one of the 4 videotaped deposition of Mr. Edward 5 Gramling in the matter of Alaska 6 Electrical Pension Fund, et al. versus 7 Pharmacia Corporation, et al. in the 8 United States District Court, District of 9 New Jersey, On February 28th, 2011 at 10 approximately 10:44 a.m. 11 My name is Juan Torres and I am the 12 legal video specialist. Will counsel 13 please introduce themselves beginning with 14 the party noticing this proceeding. 15 MS. GMITRO: Jennifer Gmitro from 16 Robbins Geller Rudman & Dowd on behalf of 17 plaintiffs. 18 MR. SAHAM: Scott Saham for the 19 plaintiff. 20 MR. MONTGOMERY: Matthew Montgomery, 21 also for the plaintiff. 22 MR. WEISS: Josh Weiss, Cadwalader, 23 Wickersham & Taft for the defendant. 24 THE VIDEOGRAPHER: Will the court 25 reporter please swear in the witness.</p>
<p>1 2 APPEARANCES: 3 4 SCOTT & SCOTT LLP 5 Attorneys for Plaintiffs 6 600 B Street 7 Suite 1500 8 San Diego, California 92101 9 10 By: MATTHEW MONTGOMERY, ESQ. 11 12 -and- 13 14 ROBBINS GELLER RUDMAN & DOWD, LLP 15 655 West Broadway 16 Suite 1900 17 San Diego, California 92101 18 By: SCOTT H. SAHAM, ESQ. 19 JENNIFER L. GMITRO, ESQ. 20 21 CADWALADER, WICKERSHAM & TAFT, LLP 22 Attorneys for Defendants 23 One World Financial Center 24 New York, New York 10281 25 By: JOSHUA R. WEISS, ESQ.</p> <p>Also Present: JUAN TORRES, Videographer</p> <p>oOo</p>	<p>1 Gramling 2 EDWARD GRAMLING, having been first 3 duly sworn by Lisa Rosenfeld, a Notary Public for 4 the State of New York, was examined and testified 5 as follows: 6 EXAMINATION BY MS. GMITRO: 7 Q. Good morning, Mr. Gramling. 8 A. Good morning. 9 Q. I introduced myself off the record, 10 but again I'm Jennifer Gmitro and I'm going to be 11 taking your deposition for the record. 12 A. Sure. 13 Q. Could you please say your name and 14 spell your name for the record? 15 A. Edward Gramling, G-r-a-m-l-i-n-g. 16 Q. Where do you currently reside? 17 A. In Manhattan. 18 Q. What is your current address? 19 A. 555 West 23rd Street, Apartment S10C, 20 zip code 10011. 21 Q. Have you ever had your deposition 22 taken before? 23 A. I have. 24 Q. How many times? 25 A. This will be my fifth time.</p>



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Edward Gramling

February 28, 2011

<p>1 Gramling</p> <p>2 Q. So you have some experience?</p> <p>3 A. I do.</p> <p>4 Q. Just so that we're all on the same</p> <p>5 page, I'm going to go over some of the basic</p> <p>6 ground rules that you're probably familiar with,</p> <p>7 but I might as well reiterate.</p> <p>8 A. Okay.</p> <p>9 Q. You understand the oath you just took</p> <p>10 a couple of minutes ago is the same oath that you</p> <p>11 would take in a court of law even though we are</p> <p>12 informal here?</p> <p>13 A. I understand that.</p> <p>14 Q. You see there's a court reporter</p> <p>15 trying to take down everything that we say so we</p> <p>16 have to try to be careful not to talk over one</p> <p>17 another.</p> <p>18 A. Yes.</p> <p>19 Q. If I ask a question and you don't</p> <p>20 understand the question, ask me to clarify and</p> <p>21 I'll do my best.</p> <p>22 A. Fair enough.</p> <p>23 Q. Your attorney may object to questions</p> <p>24 I ask today. Those objections are just being</p> <p>25 preserved for the record. You can go ahead and</p>	<p>1 Gramling</p> <p>2 school?</p> <p>3 A. 1999.</p> <p>4 Q. Did you practice following law</p> <p>5 school?</p> <p>6 A. I did, I practiced with initially a</p> <p>7 law firm in Kansas City, Blackwell Sanders, and</p> <p>8 then in 2001 I moved over to Shook Hardy & Bacon</p> <p>9 until I came to Pfizer.</p> <p>10 Q. When did you go to Pfizer?</p> <p>11 A. I was seconded to Pfizer starting</p> <p>12 January of 2009 but didn't officially become an</p> <p>13 employee of Pfizer until May of 2010.</p> <p>14 Q. In your practice what areas of law</p> <p>15 did you practice in?</p> <p>16 A. I started off in commercial</p> <p>17 litigation and then I moved to pharmaceutical</p> <p>18 litigation at Shook Hardy.</p> <p>19 Q. During that practice did you gain</p> <p>20 experience with document preservation and</p> <p>21 computer systems in order to produce documents in</p> <p>22 litigation?</p> <p>23 MR. WEISS: Objection to the form of</p> <p>24 the question.</p> <p>25 A. I did generally, yes.</p>
<p>1 Gramling</p> <p>2 answer unless he directs you otherwise.</p> <p>3 A. Okay.</p> <p>4 Q. Is there any reason why you can't</p> <p>5 give full and complete testimony today?</p> <p>6 A. No.</p> <p>7 Q. Can you tell me a little bit about</p> <p>8 your education post high school?</p> <p>9 A. Sure. I started off at Michigan</p> <p>10 State University and I graduated from high school</p> <p>11 in '86, Michigan State for a year and then I went</p> <p>12 to a small liberal arts school in New Hampshire</p> <p>13 called Thomas Moore College, and then I went to</p> <p>14 graduate school at the University of Dallas to</p> <p>15 get my -- I got my M.A. and was in the Ph.D.</p> <p>16 program there. And then I went to St. Louis</p> <p>17 University for law school and graduated from</p> <p>18 St. Louis University in 1991.</p> <p>19 Q. And your undergraduate and graduate</p> <p>20 degrees, what fields were they in?</p> <p>21 A. In political theory.</p> <p>22 Q. Nothing related to computers or</p> <p>23 technology?</p> <p>24 A. That's correct.</p> <p>25 Q. What year did you graduate from law</p>	<p>1 Gramling</p> <p>2 (Plaintiffs' Exhibit 430, Notice of</p> <p>3 30(b)(6) deposition, was so marked for</p> <p>4 identification, as of this date.)</p> <p>5 Q. I'm handing you what I've marked as</p> <p>6 Exhibit 430, do you recognize this document?</p> <p>7 A. I do.</p> <p>8 Q. Do you know what it is?</p> <p>9 A. It is a notice of 30(b)(6)</p> <p>10 deposition.</p> <p>11 Q. When did you first see this document?</p> <p>12 A. I've seen it very recently but I</p> <p>13 believe I've seen it in the past. I'm not sure</p> <p>14 when it was served but probably very soon after</p> <p>15 that.</p> <p>16 Q. If you turn to page 2 of the notice,</p> <p>17 there's a section called "Matters For Testimony."</p> <p>18 A. Yes.</p> <p>19 Q. Can you look at matter number 1</p> <p>20 there, do you see that?</p> <p>21 A. Yes.</p> <p>22 Q. It says the location and/or</p> <p>23 replacement, removal, destruction, imaging or</p> <p>24 copying in whole or in part of any computer</p> <p>25 systems used by Fred Hassan, Carrie Cox, Goran</p>



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February 28, 2011

<p>1 Gramling</p> <p>2 Ando or their assistants during their employment</p> <p>3 at Pharmacia Upjohn, Inc., Pharmacia Corporation</p> <p>4 or Pfizer, do you see that?</p> <p>5 A. I do.</p> <p>6 Q. Is it your understanding that you're</p> <p>7 here to testify as to this topic?</p> <p>8 A. Correct.</p> <p>9 MR. WEISS: I just want to note for</p> <p>10 the record obviously subject to our</p> <p>11 responses.</p> <p>12 Q. When did you become aware that you</p> <p>13 would be testifying on this topic?</p> <p>14 A. I want to say that I heard from Mr.</p> <p>15 Weiss possibly in January of this year when he</p> <p>16 indicated that we would designate someone.</p> <p>17 Q. Do you have involvement in this</p> <p>18 litigation other than your assignment to testify</p> <p>19 as to topic number 1?</p> <p>20 A. Yes.</p> <p>21 MR. WEISS: Object to the form of the</p> <p>22 question.</p> <p>23 Q. What is your involvement in this</p> <p>24 litigation?</p> <p>25 A. I serve as Pfizer's discovery</p>	<p>1 Gramling</p> <p>2 Mr. Weiss was maybe July of 2010, maybe a little</p> <p>3 bit earlier, but sometime last year.</p> <p>4 Q. Was there someone responsible --</p> <p>5 strike that. Was there someone in your role</p> <p>6 prior to the time when you became discovery</p> <p>7 counsel for Pfizer?</p> <p>8 A. For this particular matter or in</p> <p>9 general?</p> <p>10 Q. In general.</p> <p>11 A. As I mentioned, I had been seconded</p> <p>12 since January of 2009 so I was really in that</p> <p>13 role from January 2009 forward. I did take the</p> <p>14 place of one who I would say had my role before</p> <p>15 he left.</p> <p>16 Q. Who was that person?</p> <p>17 A. His name was Foster Gibbons,</p> <p>18 G-i-b-b-o-n-s.</p> <p>19 Q. Do you know whether he was also</p> <p>20 responsible for this litigation in January '09</p> <p>21 and prior?</p> <p>22 MR. WEISS: Object to the form of the</p> <p>23 question.</p> <p>24 A. I don't know specifically about this</p> <p>25 matter.</p>
<p>1 Gramling</p> <p>2 counsel, and so to the extent that there were</p> <p>3 other pieces of discovery related to this case</p> <p>4 outside of the scope of a 30(b)(6) deposition, I</p> <p>5 to some extent oversee some of those processes.</p> <p>6 Q. And when did you become Pfizer's</p> <p>7 discovery counsel in this litigation?</p> <p>8 A. Officially -- I'm sorry, I missed the</p> <p>9 last part of your question.</p> <p>10 Q. When did you become Pfizer's</p> <p>11 discovery counsel in this litigation?</p> <p>12 A. I'm not specifically designated as</p> <p>13 discovery counsel in this litigation, I am</p> <p>14 Pfizer's discovery counsel and so I have a lot of</p> <p>15 matters that I am discovery counsel in. It's</p> <p>16 not -- my duties aren't just matter specific but</p> <p>17 really generally trying to meet Pfizer's</p> <p>18 discovery obligations proactively as well, which</p> <p>19 would be outside of the environment of specific</p> <p>20 matters.</p> <p>21 Q. When did you first become involved in</p> <p>22 this litigation specifically, even if your</p> <p>23 responsibilities pertained to other matters as</p> <p>24 well?</p> <p>25 A. I think the first time I spoke with</p>	<p>1 Gramling</p> <p>2 Q. Do you know anyone who was</p> <p>3 responsible for discovery in this matter prior to</p> <p>4 January '09?</p> <p>5 A. I don't know specifically about this</p> <p>6 matter, no.</p> <p>7 Q. Do you know who Fred Hassan, Goran</p> <p>8 Ando and Carrie Cox are?</p> <p>9 A. Generally.</p> <p>10 Q. When did you become generally aware</p> <p>11 of who they are?</p> <p>12 A. Probably when I talked to Mr. Weiss</p> <p>13 in January or so of last year. I generally knew</p> <p>14 their role in Pharmacia.</p> <p>15 Q. If you could look back to <u>Exhibit</u></p> <p>16 <u>number 430, the deposition notice.</u> Just above</p> <p>17 <u>the matters for testimony section</u> that we were</p> <p>18 looking at, there's a definitions and</p> <p>19 instructions section and item number 6 refers to</p> <p>20 computer systems, do you see that?</p> <p>21 A. I do.</p> <p>22 Q. Do you understand that definition of</p> <p>23 computer systems?</p> <p>24 A. I generally understand that</p> <p>25 definition, yes.</p>



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<p style="text-align: right;">13</p> <p>1 Gramling</p> <p>2 Q. Is that the definition of computer</p> <p>3 systems that you took into consideration when</p> <p>4 preparing to provide testimony today?</p> <p>5 A. Yes.</p> <p>6 Q. What did you do to prepare to testify</p> <p>7 on this topic today?</p> <p>8 A. I met with Mr. Weiss on Friday for</p> <p>9 approximately four or five hours. I met with him</p> <p>10 an additional two hours this morning as well.</p> <p>11 Maybe I can sort of spell out my activities,</p> <p>12 that's easier for me to spell it out. So I met</p> <p>13 with counsel for preparations specifically with</p> <p>14 him.</p> <p>15 I also have spoken with several</p> <p>16 people about their knowledge relating to this</p> <p>17 topic. I also did what I would sort of call</p> <p>18 self-study where I read several deposition</p> <p>19 transcripts in this case. And I think sort of a</p> <p>20 fourth category that I would generally say is I</p> <p>21 indicated that I've kind of been involved in this</p> <p>22 case since July of 2010. So I kind of refreshed</p> <p>23 my recollection about some of the things that</p> <p>24 have gone on on the discovery front since that</p> <p>25 time.</p>	<p style="text-align: right;">15</p> <p>1 Gramling</p> <p>2 sense of what occurred during that time frame as</p> <p>3 she recalled it, general background about some of</p> <p>4 the processes and procedures in place at Pfizer</p> <p>5 at the time.</p> <p>6 Q. Leslie Wisan is that the correct</p> <p>7 pronunciation?</p> <p>8 A. That is correct.</p> <p>9 Q. What is her title?</p> <p>10 A. Leslie is not at Pfizer either. I</p> <p>11 think she's at Accenture, but she too had a role</p> <p>12 more from the business technology side in the</p> <p>13 2004 time period that related to a lot of the</p> <p>14 collection efforts associated with Cox-2</p> <p>15 discovery.</p> <p>16 Q. When you say Cox-2 discovery, what do</p> <p>17 you mean?</p> <p>18 A. Discovery related to this case, but I</p> <p>19 know there was also a Cox-2 MDL that was going on</p> <p>20 at the same time.</p> <p>21 Q. Was Ms. Wisan in the IT department</p> <p>22 during her tenure at Pfizer?</p> <p>23 A. I don't specifically know. I think</p> <p>24 she said her title was somehow in business</p> <p>25 technology. There's been kind of a lot of</p>
<p style="text-align: right;">14</p> <p>1 Gramling</p> <p>2 Q. You said that you spoke with several</p> <p>3 people. I'm assuming you mean people other than</p> <p>4 Josh Weiss or his colleagues?</p> <p>5 A. That's correct.</p> <p>6 Q. Who are those people?</p> <p>7 A. Laura Kibbe, K-i-b-b-e, Leslie Wisan,</p> <p>8 W-i-s-a-n, and some -- a member of my current</p> <p>9 staff as well.</p> <p>10 Q. Who on your current staff?</p> <p>11 A. Her name is Keysha, K-e-y-s-h-a,</p> <p>12 Dixon, D-i-x-o-n.</p> <p>13 Q. Anyone else in addition to those</p> <p>14 three people?</p> <p>15 A. No.</p> <p>16 Q. Laura Kibbe, what is her role?</p> <p>17 A. Laura Kibbe is no longer with Pfizer</p> <p>18 but she served in the role of what I would say</p> <p>19 would be discovery counsel prior to Foster</p> <p>20 Gibbons. She was at Pfizer I believe starting</p> <p>21 late 2004/2004 era and left I believe in 2008,</p> <p>22 and so she was involved directly with some of the</p> <p>23 activities related to discovery in this case.</p> <p>24 Q. What did you speak to her about?</p> <p>25 A. Really just trying to generally get a</p>	<p style="text-align: right;">16</p> <p>1 Gramling</p> <p>2 shifting in what the business units are called.</p> <p>3 So I don't know specifically what her title was.</p> <p>4 Q. Did either Ms. Kibbe or Ms. Wisan</p> <p>5 direct you to any other individuals that might</p> <p>6 have information relevant to topic number 1?</p> <p>7 A. No.</p> <p>8 Q. You also said you spoke with Keysha</p> <p>9 Dixon?</p> <p>10 A. Yes.</p> <p>11 Q. Who is Keysha Dixon?</p> <p>12 A. Keysha is on our discovery team,</p> <p>13 she's a current Pfizer employee, she runs the</p> <p>14 day-to-day matter-specific stuff related to</p> <p>15 Cox-2. She's very recent to the role as well. I</p> <p>16 think we started at the same time and so we just</p> <p>17 discussed some of the steps that we recently have</p> <p>18 taken in this litigation. Again just to kind of</p> <p>19 bring me up to speed on what has occurred</p> <p>20 recently.</p> <p>21 Q. Is she an attorney?</p> <p>22 A. She has a JD, I don't know if she's</p> <p>23 practicing currently, I'm not sure to be honest</p> <p>24 with you. I know she has a JD though.</p> <p>25 Q. You also said that you did some</p>



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<p>17</p> <p>1 Gramling</p> <p>2 self-study, reading deposition transcripts.</p> <p>3 A. Correct.</p> <p>4 Q. What deposition transcripts did you</p> <p>5 read?</p> <p>6 A. I read the deposition of Carrie Cox,</p> <p>7 I read the deposition of Mr. Ando, I read the</p> <p>8 deposition of Rich Nosseck, I'm sorry, I forget</p> <p>9 his name. I read the complaint. I think that</p> <p>10 probably constitutes most of it. I think it's</p> <p>11 Nosseck, N-o-s-s-e-c-k, if I didn't say that, I</p> <p>12 believe is correct.</p> <p>13 Q. Did you use any of the information</p> <p>14 that you reviewed from the deposition transcripts</p> <p>15 or the complaint to prepare for testifying today?</p> <p>16 MR. WEISS: Object to the form of the</p> <p>17 question.</p> <p>18 A. I mean to the extent that it makes up</p> <p>19 my knowledge of generally what the case is about,</p> <p>20 as well as to the extent that Ms. Cox or Mr. Ando</p> <p>21 generally referenced documents, I would say yes.</p> <p>22 Q. Is there anything specific in the</p> <p>23 testimony that you relied on in preparing to</p> <p>24 testify today?</p> <p>25 MR. WEISS: Object to the form of the</p>	<p>19</p> <p>1 Gramling</p> <p>2 potential role in it, where they might store</p> <p>3 their information and if they'd know of any other</p> <p>4 individuals that might have some relevant</p> <p>5 knowledge.</p> <p>6 So we just discussed that general</p> <p>7 practice and then more from the IT side what at</p> <p>8 the time she was on board in 2004, what typically</p> <p>9 the collection process looked like in terms of</p> <p>10 identifying usually the e-mail repositories, the</p> <p>11 desktop repository as well as kind of the network</p> <p>12 share environment, and those were usually the</p> <p>13 typical places for electronic materials that we</p> <p>14 would go to for custodian's information, and that</p> <p>15 process again very similar to what we do today.</p> <p>16 Q. Speaking generally about the process,</p> <p>17 what actually was the process for collecting</p> <p>18 materials from these various systems you just</p> <p>19 referred to?</p> <p>20 A. I'm sorry, can you repeat the</p> <p>21 question.</p> <p>22 Q. I'll ask by way of example. So for</p> <p>23 example once you determined that say a desktop</p> <p>24 was relevant or might contain relevant</p> <p>25 information, would you remove that desktop from</p>
<p>18</p> <p>1 Gramling</p> <p>2 question.</p> <p>3 A. I mean maybe if you asked me a more</p> <p>4 specific question about it. I can't think of</p> <p>5 something that I would say, you know, on page 150</p> <p>6 I gathered this information. So I don't know.</p> <p>7 Q. That's fine. You said that when you</p> <p>8 spoke with Ms. Kibbe, she discussed certain</p> <p>9 policies and practices that were in place during</p> <p>10 her tenure as Pfizer, correct?</p> <p>11 A. Correct.</p> <p>12 Q. What policies and practices were</p> <p>13 those?</p> <p>14 A. Well, we were generally talking about</p> <p>15 collection methodologies and how at the time</p> <p>16 Pfizer went about collecting custodial</p> <p>17 information from those individuals that had been</p> <p>18 identified as having potentially relevant</p> <p>19 materials.</p> <p>20 Q. What was that process?</p> <p>21 A. It's actually very similar to the</p> <p>22 process we currently follow, which is identifying</p> <p>23 the potential custodians, typically with help</p> <p>24 with outside counsel. Going to those</p> <p>25 individuals, interviewing them to determine their</p>	<p>20</p> <p>1 Gramling</p> <p>2 its location in order to enter into a collection</p> <p>3 process?</p> <p>4 MR. WEISS: Object to the form of the</p> <p>5 question.</p> <p>6 A. Generally, no. Generally you can</p> <p>7 retrieve that information, you have to retrieve</p> <p>8 it locally in the sense that an IT person has to</p> <p>9 go and, for lack of a better term, download, but</p> <p>10 it's essentially copy that information from the</p> <p>11 person's hard drive and then they package it to</p> <p>12 typically be sent to a vendor for continued</p> <p>13 processing.</p> <p>14 Q. When that information is copied,</p> <p>15 where is it then stored?</p> <p>16 A. Usually, well, it depends, I think</p> <p>17 it's changed over time but we usually send a copy</p> <p>18 to the vendor for storage.</p> <p>19 Q. Does Pfizer retain any copies in its</p> <p>20 own offices?</p> <p>21 A. Yes, that's what I was going to</p> <p>22 suggest. That the policy has kind of shifted and</p> <p>23 so there are instances where material that we</p> <p>24 collected internally still remains internally.</p> <p>25 Q. When you say the policy shifted, when</p>



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<p>21</p> <p>1 Gramling</p> <p>2 did it shift?</p> <p>3 A. I don't know the exact time, but it's</p> <p>4 during my tenure that the focus became more on</p> <p>5 having the vendor be the custodian of the copy</p> <p>6 that was sent to them as opposed to Pfizer.</p> <p>7 Q. So prior to this approximate time</p> <p>8 that you're referring to, Pfizer would retain it</p> <p>9 on site?</p> <p>10 A. I can't say definitively that from</p> <p>11 2005 to 2009 when the policy changed that that</p> <p>12 happened in every instance. I just don't know.</p> <p>13 Q. Do you know who would know that</p> <p>14 information?</p> <p>15 A. I mean Laura Kibbe or Foster Gibbons</p> <p>16 may have some insight into that.</p> <p>17 Q. Did you ask Ms. Kibbe whether she</p> <p>18 knew that that was the practice during her tenure</p> <p>19 there?</p> <p>20 A. Not specifically that question, no.</p> <p>21 Q. Did you review any internal Pfizer</p> <p>22 documents in order to testify today?</p> <p>23 MR. WEISS: Object to the form of the</p> <p>24 question.</p> <p>25 A. I mentioned that I consider my sort</p>	<p>23</p> <p>1 Gramling</p> <p>2 track of its computer or policy systems during</p> <p>3 1995 and 2000?</p> <p>4 A. I do not.</p> <p>5 Q. Did you ask anyone whether they knew</p> <p>6 whether Pharmacia Upjohn had any such policies or</p> <p>7 practices?</p> <p>8 A. I did not.</p> <p>9 Q. Do you know whether Pharmacia and</p> <p>10 Upjohn had any standard policies and practices</p> <p>11 for policy retention in 1995 and 2000?</p> <p>12 A. I did not.</p> <p>13 Q. Did you ask anyone else whether they</p> <p>14 knew whether any such policies existed?</p> <p>15 A. I did not.</p> <p>16 Q. Do you know what sort of e-mail</p> <p>17 systems were in use at Pharmacia Upjohn during</p> <p>18 the same time period that I was referring to?</p> <p>19 MR. WEISS: Object to the form of the</p> <p>20 question.</p> <p>21 A. I do not.</p> <p>22 Q. You've heard of Pharmacia</p> <p>23 Corporation, correct?</p> <p>24 A. I have.</p> <p>25 Q. You understand Pharmacia Corporation</p>
<p>22</p> <p>1 Gramling</p> <p>2 of own e-mails to be sort of internal. So I</p> <p>3 reviewed exchanges between say Keysha and myself,</p> <p>4 trying again to fulfill some of the recent</p> <p>5 requests from Mr. Weiss regarding this case.</p> <p>6 I think that's probably generally</p> <p>7 what I did when I said I reviewed Pfizer</p> <p>8 documents.</p> <p>9 Q. Did you look at any documents that</p> <p>10 you would describe as records of computer systems</p> <p>11 and where they were located and whether they were</p> <p>12 replaced or removed or destroyed?</p> <p>13 A. I did not.</p> <p>14 MR. WEISS: Object to the form of the</p> <p>15 question.</p> <p>16 Q. Have you heard of Pharmacia and</p> <p>17 Upjohn, Incorporated?</p> <p>18 A. I'm sorry, have I heard of them?</p> <p>19 Q. Yes.</p> <p>20 A. Yes, I have.</p> <p>21 Q. If I refer to them as Pharmacia</p> <p>22 Upjohn, is that all right?</p> <p>23 A. Yes.</p> <p>24 Q. Do you know if Pharmacia Upjohn had</p> <p>25 any standard practices or policies for keeping</p>	<p>24</p> <p>1 Gramling</p> <p>2 was the resulting company from the merger of</p> <p>3 Pharmacia Upjohn and Monsanto and Searle?</p> <p>4 A. Yes, I do understand that.</p> <p>5 Q. Do you know whether Pharmacia</p> <p>6 Corporation had any standard practices or</p> <p>7 policies for maintaining its computer system from</p> <p>8 the time it became Pharmacia Corporation until it</p> <p>9 was acquired by Pfizer?</p> <p>10 A. I only know somewhat outside of this</p> <p>11 case. I've seen policies what I would say it's</p> <p>12 probably a retention policy from Pharmacia, but</p> <p>13 again I learned that outside the scope of</p> <p>14 preparation for this.</p> <p>15 Q. What were those policies to the</p> <p>16 extent you know?</p> <p>17 A. I think it's sort of generally was a</p> <p>18 very broad corporate policy about maintaining</p> <p>19 material that might be subject to legal holds. I</p> <p>20 haven't looked at those policies very closely and</p> <p>21 certainly not used them in preparation for this</p> <p>22 deposition. So I would generally be speculating</p> <p>23 about what really if there's any details there</p> <p>24 about what their environment looked like in terms</p> <p>25 of retention, I just don't know.</p>



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<p>25</p> <p>1 Gramling</p> <p>2 Q. Do you know what e-mail systems were</p> <p>3 in place at Pharmacia Corporation?</p> <p>4 A. I do not.</p> <p>5 Q. Do you know whether -- strike that.</p> <p>6 Given that you work for Pfizer, I take it you</p> <p>7 know what Pfizer is, correct?</p> <p>8 A. I do know what Pfizer is, yes.</p> <p>9 Q. From the time that Pfizer acquired</p> <p>10 Pharmacia, which I'll represent to you is in</p> <p>11 April of 2003, did you know whether Pfizer from</p> <p>12 that time forward had any standard practices or</p> <p>13 policies for keeping track of its computer</p> <p>14 systems?</p> <p>15 MR. WEISS: Object to the form of the</p> <p>16 question.</p> <p>17 A. Actually can you repeat the question.</p> <p>18 Q. Sure. From April of 2003 to the</p> <p>19 present, do you know whether Pfizer had any</p> <p>20 standard practices or policies for keeping track</p> <p>21 of its computer systems?</p> <p>22 MR. WEISS: Object to the form of the</p> <p>23 question.</p> <p>24 A. I'm not sure what you mean by keeping</p> <p>25 track of computer systems. I mean we have a</p>	<p>27</p> <p>1 Gramling</p> <p>2 of our business. So I probably could not</p> <p>3 identify one specific name of the owner of that</p> <p>4 particular function.</p> <p>5 Q. To the extent you know, are there</p> <p>6 paper records in order to keep track of the</p> <p>7 computer assets?</p> <p>8 A. I doubt it. My assumption is that</p> <p>9 would be part of a database where it's logged.</p> <p>10 Particularly any kind of a recent activity on the</p> <p>11 IT front.</p> <p>12 Q. And in order to prepare to testify</p> <p>13 today, did you speak with anyone at IT about</p> <p>14 these tracking records that you've referred to?</p> <p>15 A. No, I did not.</p> <p>16 Q. You also referred to a corporate</p> <p>17 retention policy at Pfizer, correct?</p> <p>18 A. Yes.</p> <p>19 Q. What retention policy are you</p> <p>20 referring to?</p> <p>21 A. It's called the corporate retention</p> <p>22 policy, I think it's called -- I think the number</p> <p>23 is CP 405, and that is kind of the general what I</p> <p>24 would say is kind of the preamble of our</p> <p>25 retention ideas around retention. And then</p>
<p>26</p> <p>1 Gramling</p> <p>2 corporate retention policy as well as procedure.</p> <p>3 I don't know if it would be described as keeping</p> <p>4 track of computer systems. But there are those</p> <p>5 policies I just mentioned in place and they were</p> <p>6 in place at the time that you just referenced in</p> <p>7 2003.</p> <p>8 Q. When I refer to keeping track, I mean</p> <p>9 was there any sort of policy or practice for</p> <p>10 logging the location of certain computer systems</p> <p>11 and their removal, destruction, imaging</p> <p>12 consistent with topic number 1?</p> <p>13 MR. WEISS: Object to the form of the</p> <p>14 question.</p> <p>15 A. There is generally IT keeps track of</p> <p>16 computer assets, yes.</p> <p>17 Q. And do you know how they keep track</p> <p>18 of computer assets?</p> <p>19 A. I have never seen a log of how they</p> <p>20 keep track of their assets, no.</p> <p>21 Q. When you refer to IT is there anyone</p> <p>22 in specific in IT who would be responsible for</p> <p>23 this?</p> <p>24 A. I'm sure there is a single individual</p> <p>25 that keeps track of it, it's a pretty large part</p>	<p>28</p> <p>1 Gramling</p> <p>2 there's a more specific corporate procedure</p> <p>3 CP 506, which is kind of more of the nuts and</p> <p>4 bolts of how things are preserved at Pfizer.</p> <p>5 Q. Are both of these policies, CP 405</p> <p>6 and CP 506 --</p> <p>7 A. Correct.</p> <p>8 Q. -- are they both related to</p> <p>9 litigation holds?</p> <p>10 A. I mean there are certainly pieces of</p> <p>11 them that address legal holds, yes.</p> <p>12 Q. Do they also more broadly discuss</p> <p>13 document retention policies in general?</p> <p>14 A. Yes, correct.</p> <p>15 Q. And how long have these retention</p> <p>16 policies been in place?</p> <p>17 A. I believe since -- some form of them</p> <p>18 have been in place since the '90s but the most</p> <p>19 recent draft of -- at least I'm trying to think</p> <p>20 of the most recent draft -- I mean at least since</p> <p>21 2002.</p> <p>22 Q. Generally what is the non-litigation</p> <p>23 document retention policy at Pfizer?</p> <p>24 MR. WEISS: Object to the form of the</p> <p>25 question.</p>



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<p>29</p> <p>1 Gramling</p> <p>2 A. Well, we try to -- actually I'll</p> <p>3 start this way, we have an enterprise record</p> <p>4 retention schedule that is outside of the</p> <p>5 corporate policy and procedure and it is</p> <p>6 basically a document that lists the types of</p> <p>7 documents that our employees are likely to come</p> <p>8 across or likely to create in the business</p> <p>9 environment. And so what the retention schedule</p> <p>10 does is it assigns certain time frames that those</p> <p>11 documents are supposed to be saved for, either</p> <p>12 based on regulation or based on business</p> <p>13 practices.</p> <p>14 So a lot of the retention policy</p> <p>15 points them to making sure that they're aware of</p> <p>16 the schedule and their sort of duties are</p> <p>17 attached to making sure that they retain them</p> <p>18 consistently with the retention schedule.</p> <p>19 Q. You just referred to them. By them,</p> <p>20 do you mean employees at Pfizer?</p> <p>21 A. Correct.</p> <p>22 Q. Are all employees at Pfizer subject</p> <p>23 to this corporate retention policy?</p> <p>24 A. Yes.</p> <p>25 Q. And with specific regard to e-mail,</p>	<p>31</p> <p>1 Gramling</p> <p>2 line. I mean there's thousands of people who had</p> <p>3 available to them sort of the precursor to the</p> <p>4 journal. It was called an enterprise vault and</p> <p>5 it was implemented in 2003.</p> <p>6 Q. Do you know when in 2003 it was</p> <p>7 implemented?</p> <p>8 A. I do not.</p> <p>9 Q. You also mentioned that the policy</p> <p>10 assigns time frames for saving documents based</p> <p>11 upon either regulation or business practices?</p> <p>12 A. Correct, those are at least two</p> <p>13 categories.</p> <p>14 Q. And when you were referring to</p> <p>15 regulation, what regulations require Pfizer to</p> <p>16 retain documents?</p> <p>17 A. Quite a lot of regulations but I'll</p> <p>18 give you an example. The FDA requires us to keep</p> <p>19 for example whether it's clinical studies or</p> <p>20 adverse events for particular periods of time.</p> <p>21 But there are many, as you can probably</p> <p>22 appreciate, there's significant regulatory</p> <p>23 environment and pharmaceutical, and so, I</p> <p>24 probably couldn't list every one but I think you</p> <p>25 generally get the sense.</p>
<p>30</p> <p>1 Gramling</p> <p>2 what is the schedule for retaining e-mail,</p> <p>3 pursuant to this policy?</p> <p>4 A. It varies over time frankly. I'm</p> <p>5 sorry, it has varied over time is what I meant to</p> <p>6 say.</p> <p>7 Q. Has it been the same since 2002?</p> <p>8 A. It has not.</p> <p>9 Q. And what's the most recent policy?</p> <p>10 A. It's really not a policy, it's just</p> <p>11 how we maintain e-mails since 2007 we've had what</p> <p>12 we call a journal, which basically means we save</p> <p>13 every e-mail, that was not the policy prior to</p> <p>14 2007.</p> <p>15 Q. What was the policy prior to 2007?</p> <p>16 A. It actually depended on what business</p> <p>17 unit you were in. Some folks had more of an</p> <p>18 archiving system available to them. In other</p> <p>19 instances there were people who were using PST's</p> <p>20 to archive their materials. But there wasn't</p> <p>21 this journaling environment that saved every</p> <p>22 single e-mail.</p> <p>23 Q. What individuals had an archiving</p> <p>24 system available to them?</p> <p>25 A. I don't know if I can sort of draw a</p>	<p>32</p> <p>1 Gramling</p> <p>2 Q. Do you know what period of time the</p> <p>3 FDA requires Pfizer to save the documents for?</p> <p>4 A. I don't know, but if someone says 30</p> <p>5 plus years. But I would have to have the</p> <p>6 schedule in front of me to be able to say X</p> <p>7 document is X years. Because it's a fairly</p> <p>8 lengthy document.</p> <p>9 Q. Do you know what sorts of documents</p> <p>10 are required to be maintained pursuant to that</p> <p>11 regulation?</p> <p>12 MR. WEISS: Object to the form of the</p> <p>13 question. Asked and answered.</p> <p>14 A. Which regulation?</p> <p>15 Q. The FDA regulation that you just</p> <p>16 discussed?</p> <p>17 A. I think I'm just generally referring</p> <p>18 to FDA regulations in our industry. We don't</p> <p>19 really know specifically that this type of</p> <p>20 document requires or the FDA requires it under</p> <p>21 this regulation to be preserved for this long.</p> <p>22 Q. Did you talk to anybody about FDA</p> <p>23 preservation requirements in order to prepare to</p> <p>24 testify today?</p> <p>25 A. I did not.</p>



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<p>1 Gramling</p> <p>2 Q. Jumping back to the corporate</p> <p>3 retention policy. What was the schedule for</p> <p>4 retaining e-mail that was in place in 2003?</p> <p>5 MR. WEISS: Object to the form of the</p> <p>6 question. Are you talking about that was</p> <p>7 in place, does that refer to the e-mail or</p> <p>8 the policy?</p> <p>9 MS. GMITRO: The policy.</p> <p>10 A. I'm sorry, can you repeat the</p> <p>11 question?</p> <p>12 Q. Sure. What was -- strike that. With</p> <p>13 respect to the corporate retention policy, what</p> <p>14 was that policy for retaining e-mail in 2003?</p> <p>15 A. I think we're sort of thinking -- I'm</p> <p>16 thinking of it differently because e-mail to me</p> <p>17 is a type of way you can communicate. It's not</p> <p>18 the retention schedule doesn't or the retention</p> <p>19 policy doesn't focus on systems, it focuses on</p> <p>20 documents and whether or not a particular e-mail</p> <p>21 falls within say a business record or something</p> <p>22 that might have to be preserved for a longer</p> <p>23 period of time. They're not called out in a</p> <p>24 retention policy. This policy again is a</p> <p>25 broad -- this is why we reserve information</p>	<p>1 Gramling</p> <p>2 Q. That need to be retained pursuant to</p> <p>3 this business policy. Does the policy define a</p> <p>4 business record?</p> <p>5 A. It does broadly.</p> <p>6 Q. What is that definition of a business</p> <p>7 record?</p> <p>8 A. It usually contemplates something</p> <p>9 that's necessary for critical business to carry</p> <p>10 on, and so for example a marketing plan of a</p> <p>11 particular drug or financial information around a</p> <p>12 particular drug. So it's really information</p> <p>13 critical to the continuation of business is how I</p> <p>14 would define it. Unless I had in front of me, I</p> <p>15 couldn't give you the actual definition, but it's</p> <p>16 some -- that's broadly what it encompasses.</p> <p>17 Q. Did you look at the -- strike that.</p> <p>18 Is this policy in writing?</p> <p>19 A. Yes.</p> <p>20 Q. Did you look at this policy in order</p> <p>21 to prepare to testify for today?</p> <p>22 A. Not for this deposition, I did not.</p> <p>23 MS. GMITRO: Josh, do you know</p> <p>24 whether defendants have produced that</p> <p>25 retention policy in this litigation?</p>
<p>1 Gramling</p> <p>2 because it's important for the business, for</p> <p>3 continuity purposes, for business purposes, so it</p> <p>4 doesn't get down to that granularity of about</p> <p>5 specific systems.</p> <p>6 Q. Was there any part of the retention</p> <p>7 policy that would encompass e-mail</p> <p>8 communications?</p> <p>9 MR. WEISS: Object to the form of the</p> <p>10 question.</p> <p>11 A. Yes, I mean to the extent that a</p> <p>12 business record is -- an e-mail was a business</p> <p>13 record, the policy contemplates that type of</p> <p>14 retention being applied to it. I think again</p> <p>15 part of the reason -- the retention policy and</p> <p>16 procedure are obviously outside of maybe this is</p> <p>17 what we're getting into the legal hold</p> <p>18 environment and so it's more directly, if in an</p> <p>19 ideal world there was no litigation at Pfizer,</p> <p>20 this is still why we would have to retain</p> <p>21 information. But of course once there is an</p> <p>22 obligation to retain it in the legal context, the</p> <p>23 retention schedule frankly becomes meaningless.</p> <p>24 Q. And you refer to business records?</p> <p>25 A. Yes.</p>	<p>1 Gramling</p> <p>2 MR. WEISS: I know we have produced</p> <p>3 document retention policies. I can't tell</p> <p>4 you off the top of my head which ones.</p> <p>5 MS. GMITRO: Would you be willing to</p> <p>6 produce this one if we requested it?</p> <p>7 MR. WEISS: Assuming I haven't</p> <p>8 already done so and assuming that it's</p> <p>9 relevant to the time period in question,</p> <p>10 yes.</p> <p>11 Q. If a document fell under the</p> <p>12 definition of business record in this policy, how</p> <p>13 long would that document be retained for?</p> <p>14 A. It varied by the type of business</p> <p>15 record, it might only need to be preserved for</p> <p>16 like one year or two years. Other documents may</p> <p>17 be more critical like financial information.</p> <p>18 Again the categories of documents are pretty</p> <p>19 extensive.</p> <p>20 Frankly I'm just not that familiar</p> <p>21 with the actual schedule itself to assign a</p> <p>22 particular time frame to a particular document.</p> <p>23 Q. Is every employee at Pfizer given a</p> <p>24 copy of this document?</p> <p>25 A. Every employee has access to the</p>



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<p>1 Gramling</p> <p>2 retention schedule.</p> <p>3 Q. I asked you earlier if you knew who</p> <p>4 Fred Hassan was, and you know who Fred Hassan is,</p> <p>5 correct?</p> <p>6 A. I do.</p> <p>7 Q. Do you know who his assistants were</p> <p>8 from the time that he was employed at Pharmacia</p> <p>9 Upjohn until the time he left in April of 2003?</p> <p>10 A. I'm sorry, his what?</p> <p>11 Q. Assistants, secretaries.</p> <p>12 A. I do not.</p> <p>13 Q. Did you ever have an understanding</p> <p>14 that one of his assistants was named Roz</p> <p>15 Dreydoppel?</p> <p>16 A. I came to know of her very recently.</p> <p>17 Q. When did you come to know of her?</p> <p>18 A. Friday, maybe. At the earliest. It</p> <p>19 may have even been over the weekend.</p> <p>20 Q. When you were preparing to testify</p> <p>21 regarding topic number 1, did you seek out</p> <p>22 information pertaining to any computer systems</p> <p>23 that were used by Fred Hassan's assistants</p> <p>24 including Ms. Dreydoppel?</p> <p>25 A. No.</p>	<p>1 Gramling</p> <p>2 Q. Do you know who Margaret Griggs is?</p> <p>3 A. No.</p> <p>4 Q. Do you know who Susan Reiner is?</p> <p>5 A. Susan Reiner, no.</p> <p>6 Q. I'll represent to you that Mr. Ando</p> <p>7 testified that those were two of his assistants</p> <p>8 while he was employed with Pharmacia Upjohn,</p> <p>9 Pharmacia Corporation up until 2003.</p> <p>10 A. Okay.</p> <p>11 Q. Did you ask anybody whether these two</p> <p>12 individuals had two computer systems that had</p> <p>13 been collected from?</p> <p>14 A. I did not, no.</p> <p>15 Q. Do you know what happened to any of</p> <p>16 those three individuals, Roz Dreydoppel's,</p> <p>17 Margaret Griggs' or Susan Reiner's computer</p> <p>18 systems?</p> <p>19 A. I do not, no.</p> <p>20 Q. Do you know who would know?</p> <p>21 A. I don't know who would know.</p> <p>22 Q. Did you make any effort to figure out</p> <p>23 what happened to any of those three individuals'</p> <p>24 computer systems?</p> <p>25 A. The three individuals outside -- I</p>
<p>1 Gramling</p> <p>2 Q. Did you seek out any information</p> <p>3 concerning computer systems that were used by</p> <p>4 assistants to either Carrie Cox or Goran Ando?</p> <p>5 A. No. I should clarify about Ms.</p> <p>6 Dreydoppel. We recently tried to determine</p> <p>7 whether we had any of Ms. Dreydoppel's</p> <p>8 information. Recently meaning prior to this</p> <p>9 deposition today, this morning. And we do not</p> <p>10 have any collections for Ms. Dreydoppel. I</p> <p>11 confirmed that this morning.</p> <p>12 Q. What do you mean that you don't have</p> <p>13 any collections for Ms. Dreydoppel?</p> <p>14 A. Well, we tried to determine if there</p> <p>15 had been any materials collected from Ms.</p> <p>16 Dreydoppel, either specifically related to Cox-2</p> <p>17 litigation or we have a policy also where we, if</p> <p>18 she would have been collected for other</p> <p>19 litigations, we would consider that a prior</p> <p>20 collection.</p> <p>21 Q. And did you look to see whether there</p> <p>22 had been any collections for, for instance, Mr.</p> <p>23 Ando's assistants?</p> <p>24 A. I don't know who Mr. Ando's</p> <p>25 assistants are.</p>	<p>1 Gramling</p> <p>2 mean outside Ms. Dreydoppel, I've never heard</p> <p>3 their names until you just mentioned it.</p> <p>4 Q. What efforts did you make to find out</p> <p>5 what happened to Ms. Dreydoppel's computer</p> <p>6 systems?</p> <p>7 A. This morning I put a request in to</p> <p>8 our group to determine if there had been any</p> <p>9 collection prior on her material, and I also</p> <p>10 asked our vendor Xerox whether there were any</p> <p>11 materials on their site, and both instances came</p> <p>12 back in the negative.</p> <p>13 Q. With regard to Fred Hassan in 1997</p> <p>14 when he began his employment at Pharmacia Upjohn</p> <p>15 and he left in 2007, what computers did he</p> <p>16 utilize?</p> <p>17 MR. WEISS: Object to the form.</p> <p>18 A. I'm not sure how specific you want me</p> <p>19 to be. I'm not sure how -- I mean I know he used</p> <p>20 e-mail, I mean I know he used a network share,</p> <p>21 and actually that's all I know.</p> <p>22 Q. Do you know whether he had any sort</p> <p>23 of a handheld device or PDA?</p> <p>24 A. I don't know that.</p> <p>25 Q. Do you know whether he had a laptop</p>



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<p>41</p> <p>1 Gramling</p> <p>2 computer or portable computer of any kind?</p> <p>3 A. I assume that he did because he had a</p> <p>4 network share, but I also think that he testified</p> <p>5 that he wasn't even sure if he had a computer.</p> <p>6 Q. And when you say a network share,</p> <p>7 what do you mean?</p> <p>8 A. Well, I'll use an example. On my</p> <p>9 laptop I can store things locally which would be</p> <p>10 to my C drive or I can save things to the network</p> <p>11 share which would be my G drive, which basically</p> <p>12 it means it's saved space on an enterprise server</p> <p>13 as opposed to locally on your computer.</p> <p>14 Q. Did Mr. Hassan have a desktop</p> <p>15 computer as well?</p> <p>16 A. I don't know the answer to that.</p> <p>17 Q. You referred to his access to e-mail.</p> <p>18 What's the first record that you have of his --</p> <p>19 the location of his e-mail?</p> <p>20 MR. WEISS: Object to the form of the</p> <p>21 question.</p> <p>22 A. I'm not sure. First record --</p> <p>23 Q. Let me ask that question differently.</p> <p>24 It's a bad question.</p> <p>25 A. Okay.</p>	<p>43</p> <p>1 Gramling</p> <p>2 referring to?</p> <p>3 MR. WEISS: Object to the form of the</p> <p>4 question.</p> <p>5 A. You mean the number of e-mails we</p> <p>6 produced?</p> <p>7 Q. Sorry, from what source?</p> <p>8 A. Again there was -- during the</p> <p>9 migration there was -- migration or integration</p> <p>10 between Pharmacia and Pfizer, there was</p> <p>11 apparently a server that held e-mails and that is</p> <p>12 a source that they went to to try to find any</p> <p>13 e-mails from Mr. Hassan.</p> <p>14 Q. When e-mail is stored on a server, is</p> <p>15 it still assigned to a specific custodian on that</p> <p>16 server?</p> <p>17 A. It can be, yes.</p> <p>18 Q. I'll represent to you that of the</p> <p>19 documents that have been produced in this</p> <p>20 litigation, there was Metadata associated with</p> <p>21 those documents as you may know. And in the</p> <p>22 custodial field for the Metadata we were unable</p> <p>23 to find any e-mail for Mr. Hassan dated prior to</p> <p>24 September 2001 or any documents for Mr. Hassan</p> <p>25 prior to September 2001.</p>
<p>42</p> <p>1 Gramling</p> <p>2 Q. Do you know whether Mr. Hassan's</p> <p>3 e-mail was ever preserved for any purpose</p> <p>4 including litigation?</p> <p>5 MR. WEISS: Object to the form of the</p> <p>6 question.</p> <p>7 A. I know that we have produced e-mails</p> <p>8 from him and so they were preserved to some</p> <p>9 extent, yes.</p> <p>10 Q. When I asked you whether his e-mail</p> <p>11 has ever been preserved, I specifically mean</p> <p>12 e-mail that was either stored on a device and is</p> <p>13 part of his custodial file?</p> <p>14 A. We produced the e-mails from his</p> <p>15 custodial files and they were stored. I don't</p> <p>16 know where they were stored, I don't know if they</p> <p>17 were stored on the network share or if they were</p> <p>18 stored locally or if there was a server from</p> <p>19 Pharmacia that we could access to -- there are</p> <p>20 various places they could be, and at some point</p> <p>21 those were all searched to try to find his</p> <p>22 e-mails.</p> <p>23 Q. When you say you produced documents</p> <p>24 from his custodial files or e-mail from his</p> <p>25 custodial files, what specifically are you</p>	<p>44</p> <p>1 Gramling</p> <p>2 A. Okay.</p> <p>3 Q. Do you know why that might be the</p> <p>4 case?</p> <p>5 A. I do not. I mean I say I don't know.</p> <p>6 It's very possible that if you're talking about</p> <p>7 time frame before 2001, that there was -- this is</p> <p>8 complete speculation -- there was an auto delete</p> <p>9 function on Mr. Hassan's e-mail that if he didn't</p> <p>10 have a litigation hold, those e-mails would</p> <p>11 naturally fall off the system.</p> <p>12 Q. Do you know whether in fact there was</p> <p>13 an auto delete function of any kind?</p> <p>14 A. We're not sure, Ms. Kibbe indicated</p> <p>15 that that was possible, but I don't know if</p> <p>16 anyone has confirmed that auto delete was</p> <p>17 actually functioning at that time, although my</p> <p>18 suspicion is it was.</p> <p>19 Q. Do you know when the auto delete</p> <p>20 function stopped being used? If that's the case.</p> <p>21 A. I'm sorry, what time frame are we</p> <p>22 talking about?</p> <p>23 Q. I believe you were referring to the</p> <p>24 period prior to 2001, correct?</p> <p>25 A. I was for that question, yes.</p>



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<p>1 Gramling</p> <p>2 Q. So any time going forward from 2001,</p> <p>3 do you know when the auto delete function stopped</p> <p>4 being used?</p> <p>5 A. I do not.</p> <p>6 MR. WEISS: Object to the form of the</p> <p>7 question. It assumes facts --</p> <p>8 A. Yes. And I'm not sure that auto</p> <p>9 delete was even in operation. I'm just</p> <p>10 speculating in light of how I know these things,</p> <p>11 that that's a possibility.</p> <p>12 Q. Of the custodial documents that you</p> <p>13 have for Mr. Hassan, what is the earliest time</p> <p>14 period for which you have custodial documents for</p> <p>15 him?</p> <p>16 A. I don't know.</p> <p>17 Q. Do you know who would know?</p> <p>18 A. I mean I assume counsel would know.</p> <p>19 Somebody who has some more intimate knowledge of</p> <p>20 documents that we actually produced. But I don't</p> <p>21 know anyone specifically that can say what's the</p> <p>22 earliest document we have produced or have</p> <p>23 actually.</p> <p>24 Q. You understand that when Pfizer</p> <p>25 acquired Pharmacia Corporation in April of 2003,</p>	45	<p>1 Gramling</p> <p>2 keeping track of computer systems during the</p> <p>3 integration process between Pfizer and Pharmacia</p> <p>4 Corporation?</p> <p>5 MR. WEISS: Object to the form of the</p> <p>6 question.</p> <p>7 A. So this gentleman that I mentioned,</p> <p>8 Rich Nosseck, was the head of the integration</p> <p>9 activities within Pharmacia and Pfizer. So to</p> <p>10 the extent that integration needed to occur on</p> <p>11 the IT front and the infrastructures needed to be</p> <p>12 consolidated, that was his role that he played.</p> <p>13 Q. Did you speak with him to prepare for</p> <p>14 today?</p> <p>15 A. I did not. I read his deposition</p> <p>16 though.</p> <p>17 MR. SAHAM: Would you guys produce</p> <p>18 the deposition transcript?</p> <p>19 MR. WEISS: I'll take it under</p> <p>20 advisement.</p> <p>21 Q. When you said you read the deposition</p> <p>22 transcript, in what litigation was he deposed?</p> <p>23 A. I believe it's another Cox-2</p> <p>24 securities case.</p> <p>25 Q. Do you know when that deposition was</p>	47
<p>1 Gramling</p> <p>2 Mr. Hassan left the company, correct?</p> <p>3 A. I do understand that, yes.</p> <p>4 Q. Do you know what happened to his</p> <p>5 computer systems at that time?</p> <p>6 A. We do not.</p> <p>7 Q. Do you know whether there's anyone</p> <p>8 who would know?</p> <p>9 A. Well, I went to what I thought were</p> <p>10 the most likely sources, namely Laura, Leslie and</p> <p>11 Rich Nosseck, and as far as for those three</p> <p>12 individual when they left, the day after, we do</p> <p>13 not have a record of anyone going to collect</p> <p>14 specifically from their desktop, materials that</p> <p>15 may or may not have been there.</p> <p>16 I know however that we have found</p> <p>17 information on network shares as well as e-mails,</p> <p>18 and so frankly it doesn't surprise me that</p> <p>19 there's no desktop information for those</p> <p>20 individuals. But in terms of that time frame</p> <p>21 when April 15th, the merger occurred, to</p> <p>22 April 16th when they left, we don't have a</p> <p>23 specific log of anyone going to their computers.</p> <p>24 Q. Was there anyone responsible in the</p> <p>25 middle of April of 2003 and going forward for</p>	46	<p>1 Gramling</p> <p>2 taken?</p> <p>3 A. Within the last three months.</p> <p>4 Q. Did he testify at all specifically to</p> <p>5 any of the computer systems that Hassan was using</p> <p>6 during his employment prior to Pharmacia</p> <p>7 Corporation or Pharmacia Upjohn prior to the</p> <p>8 merger with Pfizer?</p> <p>9 A. That's why I spoke to him directly</p> <p>10 because he didn't specifically address these</p> <p>11 people's computers. He was responsible for a</p> <p>12 more global integration of the information</p> <p>13 between Pharmacia and Pfizer, so I didn't think</p> <p>14 that he had any particular additional insight</p> <p>15 into what happened on April 16th, 2003.</p> <p>16 Q. Did he testify about what the</p> <p>17 practices were for keeping track of the computer</p> <p>18 systems during the integration process?</p> <p>19 MR. WEISS: Object to the form of the</p> <p>20 question.</p> <p>21 A. I'm sure as you can probably</p> <p>22 appreciate that at that time there's a large</p> <p>23 effort being made to transition critical</p> <p>24 information into the Pfizer environment. It was</p> <p>25 a process that Rich indicated took over two years</p>	48



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<p style="text-align: right;">49</p> <p>1 Gramling</p> <p>2 and cost Pfizer over \$140 million, and so there</p> <p>3 were a lot of work streams designed to assure</p> <p>4 that any data that Pharmacia had that was</p> <p>5 critical to the business of Pfizer would be</p> <p>6 migrated into our environment.</p> <p>7 Q. You mentioned going back to the</p> <p>8 computer systems that you testified Hassan used</p> <p>9 including e-mail and that he had a network share.</p> <p>10 What is the earliest record or what's your</p> <p>11 earliest knowledge of any preservation of Mr.</p> <p>12 Hassan's e-mail?</p> <p>13 MR. WEISS: Object to the form of the</p> <p>14 question.</p> <p>15 A. I don't understand the question</p> <p>16 actually.</p> <p>17 Q. You testified that Mr. Hassan</p> <p>18 utilized e-mail, correct?</p> <p>19 A. Correct.</p> <p>20 Q. How do you know that?</p> <p>21 A. Because counsel indicated that we</p> <p>22 produced e-mail from him. But we also have</p> <p>23 records indicating that we collected from his</p> <p>24 e-mail and his network share.</p> <p>25 Q. Do you know when that collection was</p>	<p style="text-align: right;">51</p> <p>1 Gramling</p> <p>2 within the scope of topic number 1. So</p> <p>3 I'm willing to give you a little bit more</p> <p>4 leeway on this but you're going to have to</p> <p>5 explain to me how that is within the scope</p> <p>6 of topic number 1. So it does not refer</p> <p>7 to records retention topics procedure.</p> <p>8 MS. GMITRO: I understand where</p> <p>9 you're going but this topic refers to the</p> <p>10 replacement, removal, destruction, imaging</p> <p>11 or copying of the computer systems</p> <p>12 utilized by these three individuals. And</p> <p>13 to the extent that any documents were</p> <p>14 copied or removed for the purposes of</p> <p>15 litigation hold, litigation hold is</p> <p>16 relevant.</p> <p>17 So I'm asking about the policies for</p> <p>18 litigation hold in order to establish what</p> <p>19 happened -- whether what happened with Mr.</p> <p>20 Hassan's or Ando's or Carrie Cox's</p> <p>21 documents, I think it's clearly within</p> <p>22 topic number 1 and I think it's clearly</p> <p>23 relevant.</p> <p>24 MR. WEISS: I disagree with you, I</p> <p>25 read this topic as relating to the</p>
<p style="text-align: right;">50</p> <p>1 Gramling</p> <p>2 done?</p> <p>3 A. I don't know the specific date, no.</p> <p>4 Q. Do you know who would know?</p> <p>5 A. We have a collections department that</p> <p>6 may have access to the exact time frame that it</p> <p>7 was done. I assume it's around the time that</p> <p>8 documents were ultimately produced but I don't</p> <p>9 have the records in front of me, so I don't know.</p> <p>10 Q. Is there a paper record of this?</p> <p>11 A. I don't know if there's a paper</p> <p>12 record or if it's electronic, I'm not sure how</p> <p>13 we're storing those right now, I'm not sure.</p> <p>14 Q. When we were talking about the</p> <p>15 corporate retention policy earlier you also</p> <p>16 referred to an aspect of the policy that referred</p> <p>17 to litigation, correct?</p> <p>18 A. To legal hold, correct.</p> <p>19 Q. What is that policy with respect to</p> <p>20 legal hold?</p> <p>21 MR. WEISS: I just want to put an</p> <p>22 objection on the record. I think -- I've</p> <p>23 let you ask a lot of questions about</p> <p>24 policies and procedures and records</p> <p>25 retention. I do not consider that to be</p>	<p style="text-align: right;">52</p> <p>1 Gramling</p> <p>2 physical aspect what happened to it. What</p> <p>3 actually happened to the computer system.</p> <p>4 Not whether or not documents were</p> <p>5 preserved or not pursuant to a document</p> <p>6 retention policy, and I'm going to let you</p> <p>7 go a little bit further on this so we</p> <p>8 don't have to argue about it but I will</p> <p>9 tell you if you start getting into issues</p> <p>10 of legal hold, there are work product</p> <p>11 issues concerning that.</p> <p>12 MS. GMITRO: And you can object.</p> <p>13 MR. WEISS: And I will.</p> <p>14 Q. Going back to the corporate retention</p> <p>15 policy that we were referring to, what is the</p> <p>16 litigation hold policy?</p> <p>17 MR. WEISS: Object to the form of the</p> <p>18 question, assumes facts not in evidence.</p> <p>19 A. Broadly it highlights for Pfizer</p> <p>20 employees the need to suspend a retention</p> <p>21 schedule documents that they feel might be able</p> <p>22 to be subject to disposition and indicate to them</p> <p>23 that legal holds trump any retention schedule,</p> <p>24 and so it's their obligation to maintain those</p> <p>25 documents subject to the legal hold that they</p>



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<p>53</p> <p>1 Gramling</p> <p>2 received.</p> <p>3 Q. And do you know whether any of the</p> <p>4 computer systems that Hassan utilized prior to</p> <p>5 the merger with -- prior to Pfizer's acquisition</p> <p>6 with Pharmacia or integration process were</p> <p>7 subject to a legal hold?</p> <p>8 MR. WEISS: Object to the form of the</p> <p>9 question.</p> <p>10 A. I don't.</p> <p>11 Q. Did you do anything to try to find</p> <p>12 out whether that was the case?</p> <p>13 A. I did not. Again I did not see that</p> <p>14 within sort of the scope of what I was designated</p> <p>15 to do.</p> <p>16 Q. I'll represent to you that you</p> <p>17 received e-mail from individuals, custodial</p> <p>18 e-mails from individuals other than Hassan and</p> <p>19 Goran Ando prior to September 2001. The reason I</p> <p>20 reference September 2001 is because I mention</p> <p>21 that we don't have any custodial e-mail for Fred</p> <p>22 Hassan prior to that time. Do you know why</p> <p>23 e-mails for other Pharmacia executives other than</p> <p>24 Hassan or Goran Ando were preserved?</p> <p>25 MR. WEISS: Objection to the form of</p>	<p>55</p> <p>1 Gramling</p> <p>2 Upjohn and Pharmacia Corporation?</p> <p>3 A. I do not know specifically.</p> <p>4 Q. Did you do anything to try to find</p> <p>5 out what kind of computer systems that he used?</p> <p>6 A. I think again generally for Mr.</p> <p>7 Hassan or Ms. Cox and for Mr. Ando, it's my</p> <p>8 understanding that they have the same type of</p> <p>9 systems and that there was a network share e-mail</p> <p>10 and potentially a laptop or a desktop computer.</p> <p>11 But other than that, I don't know the systems.</p> <p>12 Q. And do you know whether there were</p> <p>13 any collection efforts done to preserve Mr.</p> <p>14 Ando's e-mail, network share or desktop?</p> <p>15 MR. WEISS: Object to the form of the</p> <p>16 question.</p> <p>17 A. I know we tried to locate documents</p> <p>18 for Mr. Ando, yes.</p> <p>19 Q. Do you know when?</p> <p>20 A. I do not know the specific time</p> <p>21 frame.</p> <p>22 Q. Do you know whether the computer</p> <p>23 systems of Mr. Ando's that you just listed were</p> <p>24 preserved following Pfizer's acquisition of</p> <p>25 Pharmacia Corporation?</p>
<p>54</p> <p>1 Gramling</p> <p>2 the question. Assume facts not in</p> <p>3 evidence.</p> <p>4 A. I can speculate as to why, it's</p> <p>5 because those custodians saved e-mails other than</p> <p>6 just the format of the messaging system. For</p> <p>7 example, I can store my e-mails today in PST,</p> <p>8 that's again outside of the e-mail environment,</p> <p>9 and again without knowing fully what these</p> <p>10 executives did, I can speculate that maybe that's</p> <p>11 what they did. But I don't really know to answer</p> <p>12 your question.</p> <p>13 Q. Is it fair to say you didn't do</p> <p>14 anything specific to find out why other</p> <p>15 executives' e-mails weren't preserved?</p> <p>16 A. I did not.</p> <p>17 Q. Earlier you mentioned that you know</p> <p>18 who Goran Ando is, correct?</p> <p>19 A. Generally, yes.</p> <p>20 Q. You understand that he was employed</p> <p>21 at Pharmacia Upjohn and Pharmacia Corporation</p> <p>22 prior to the acquisition by Pfizer, correct?</p> <p>23 A. I do.</p> <p>24 Q. Do you know what computer systems he</p> <p>25 utilized during his employment at Pharmacia</p>	<p>56</p> <p>1 Gramling</p> <p>2 MR. WEISS: Object to the form of the</p> <p>3 question.</p> <p>4 A. No, I do not know that.</p> <p>5 Q. Do you know who would know?</p> <p>6 A. Again the individuals that I spoke to</p> <p>7 and individuals that I suspected would have the</p> <p>8 most information, and they were not able to say</p> <p>9 specifically post April 16th what happened to</p> <p>10 those computers or those e-mails of those</p> <p>11 individuals.</p> <p>12 Q. And do you know whether any of Goran</p> <p>13 Ando's computer systems were subject to a legal</p> <p>14 hold during or prior to 2003?</p> <p>15 MR. WEISS: Object to the form of the</p> <p>16 question. Calls for work product.</p> <p>17 A. I do not know.</p> <p>18 Q. Again do you know who would know?</p> <p>19 A. I'm assuming counsel knows when the</p> <p>20 legal hold was put into place but I don't know</p> <p>21 specifically if there's a Pfizer individual that</p> <p>22 knows that information.</p> <p>23 MS. GMITRO: Let's take a short</p> <p>24 break.</p> <p>25 THE VIDEOGRAPHER: The time is 11:51</p>



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<p>1 Gramling</p> <p>2 a.m. We're going off the record.</p> <p>3 (Recess taken)</p> <p>4 THE VIDEOGRAPHER: The time is 12:04</p> <p>5 p.m. We're back on the record.</p> <p>6 BY MS. GMITRO:</p> <p>7 Q. Welcome back. I will represent to</p> <p>8 you that in his deposition Fred Hassan testified</p> <p>9 that he did send and receive e-mails prior to</p> <p>10 September 2001, and you mentioned that there was</p> <p>11 possibly an auto delete function in place at this</p> <p>12 time, correct?</p> <p>13 A. I did mention that, yes.</p> <p>14 Q. What did you do to determine that</p> <p>15 that was a possibility?</p> <p>16 A. I didn't determine specifically for</p> <p>17 2001, I just generally know e-mail technology.</p> <p>18 Q. But you don't know whether</p> <p>19 specifically there was an auto delete function in</p> <p>20 place at the time frame I just referred to?</p> <p>21 MR. WEISS: Objection. Asked and</p> <p>22 answered.</p> <p>23 A. Correct.</p> <p>24 Q. And if there were an auto delete</p> <p>25 function in place, then how would that work?</p>	<p>1 Gramling</p> <p>2 general, are there any other reasons you can</p> <p>3 think of besides the auto delete function that</p> <p>4 might explain why there was no e-mail for Mr.</p> <p>5 Hassan prior to September of 2001?</p> <p>6 MR. WEISS: Object to the form of the</p> <p>7 question. You're talking about from a</p> <p>8 technology perspective meaning other than</p> <p>9 the fact that there were no responsive</p> <p>10 documents?</p> <p>11 MS. GMITRO: I'm talking about -- do</p> <p>12 you want me to ask the question again?</p> <p>13 MR. WEISS: I want to make sure I</p> <p>14 understand if you're asking a technical</p> <p>15 question as opposed to they weren't</p> <p>16 responsive, those are two different</p> <p>17 questions.</p> <p>18 MS. GMITRO: I'm just asking a</p> <p>19 technical question.</p> <p>20 A. Mr. Hassan maybe didn't use PSTs.</p> <p>21 Q. What are PSTs?</p> <p>22 A. It's a personal folder that you can</p> <p>23 take out of your e-mail environment and store</p> <p>24 messages there. Again I can speculate it sounds</p> <p>25 to me like Pharmacia did not have the same type</p>
<p>1 Gramling</p> <p>2 MR. WEISS: Object to the form of the</p> <p>3 question.</p> <p>4 A. Generally you can set it to delete</p> <p>5 whenever you would like so that you delete an</p> <p>6 e-mail out of your e-mail box and it stays in the</p> <p>7 delete portion of it for 30 to 60 days depending</p> <p>8 on how the employee or employer really wants to</p> <p>9 do it. You can set any time frame you'd like.</p> <p>10 That's kind of generally how it works. I have no</p> <p>11 idea how it worked in 2001.</p> <p>12 Q. When you say you, do you mean at the</p> <p>13 employer level or at the individual level?</p> <p>14 MR. WEISS: Object to the form of the</p> <p>15 question.</p> <p>16 A. I think it can be done both ways, you</p> <p>17 can probably do an enterprise-wide or an</p> <p>18 individual can do it. Again it probably depends</p> <p>19 on the technology you have. I'm sure the modern</p> <p>20 technology meaning the current technology allows</p> <p>21 both formats. I'm not that well aware of it in</p> <p>22 2001 to be able to say whether both were</p> <p>23 available at the time.</p> <p>24 Q. Just based on your general knowledge</p> <p>25 of computer systems and document retention in</p>	<p>1 Gramling</p> <p>2 of journal that Pfizer had and so they're not</p> <p>3 obligated to save every single e-mail. Those</p> <p>4 would be some of my spec -- I really don't know.</p> <p>5 Q. And if there were an e-mail that</p> <p>6 qualified as a business record, pursuant to the</p> <p>7 corporate retention policy that you described</p> <p>8 earlier, how would that e-mail be preserved?</p> <p>9 MR. WEISS: Can I object to the form</p> <p>10 of the question. Let's get clarification</p> <p>11 as to time frame.</p> <p>12 Q. How long was the corporate retention</p> <p>13 policy that you talked about before in place?</p> <p>14 A. For a business record?</p> <p>15 Q. Yes.</p> <p>16 A. I think I mentioned it depends on the</p> <p>17 type of business record, so if it's a marketing</p> <p>18 plan that might have a shorter shelf life than</p> <p>19 say a financial document.</p> <p>20 Q. Let me clarify, I don't mean specific</p> <p>21 documents subject to the record, my first</p> <p>22 question is just the corporate retention policy</p> <p>23 at Pfizer. Actually I think you said it was in</p> <p>24 place at least from 2002 on, correct?</p> <p>25 A. Correct.</p>



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<p>1 Gramling</p> <p>2 Q. So from 2002 on if an e-mail</p> <p>3 qualified as a business record under that policy,</p> <p>4 how would that initially be preserved?</p> <p>5 MR. WEISS: Object to the form of the</p> <p>6 question. Asked and answered.</p> <p>7 A. Again the individual is obligated to</p> <p>8 be the preserver of their information, and so in</p> <p>9 that instance probably in 2002 that individual</p> <p>10 will store that information in a PST.</p> <p>11 Q. Is there any other way that they can</p> <p>12 store that information?</p> <p>13 MR. WEISS: Objection to the form of</p> <p>14 the question.</p> <p>15 A. You might be able to save it locally.</p> <p>16 A particular e-mail text. For example you could</p> <p>17 paste it into a Word document and save it</p> <p>18 locally. But a majority would be on the PST</p> <p>19 front would be my guess.</p> <p>20 Q. If Hassan's documents were subject to</p> <p>21 a legal hold in late 2000, would an auto delete</p> <p>22 function be turned off for that purpose?</p> <p>23 MR. WEISS: Objection to the form of the</p> <p>24 question.</p> <p>25 A. Would it be, I have no idea.</p>	<p>1 Gramling</p> <p>2 why other executives might have had e-mail for</p> <p>3 production while Mr. Hassan would not have during</p> <p>4 this period?</p> <p>5 MR. WEISS: Object to the form of the</p> <p>6 question.</p> <p>7 A. I can speculate. At the end of the</p> <p>8 deposition there's an example of he's not a pack</p> <p>9 rat with respect to his documents. That's</p> <p>10 another possibility that certain executives are a</p> <p>11 little bit more likely to preserve information</p> <p>12 for whatever reason they needed to either access</p> <p>13 it to have it available for later on, to CYA,</p> <p>14 whatever, there's probably a variety of reasons.</p> <p>15 Q. Are you aware that in this litigation</p> <p>16 specifically 80 custodians were chosen from whose</p> <p>17 files to produce documents?</p> <p>18 A. I do know that that number is about</p> <p>19 80, yes.</p> <p>20 Q. Are you aware that Hassan and Cox</p> <p>21 testified that their secretaries utilized their</p> <p>22 e-mail systems on their behalf, to either print</p> <p>23 out e-mail or send e-mails on their behalf?</p> <p>24 A. I read Ms. Cox's deposition and so</p> <p>25 I'm generally aware that that's what she</p>
<p>1 Gramling</p> <p>2 Q. Do you know when Mr. Hassan's</p> <p>3 documents were first subject to a legal hold?</p> <p>4 A. I do not.</p> <p>5 Q. Do you know who would know?</p> <p>6 A. I assume counsel would know.</p> <p>7 Q. What steps did you take to determine</p> <p>8 in order to come to the conclusion that you don't</p> <p>9 know when his documents were first subject to a</p> <p>10 legal hold?</p> <p>11 A. I didn't investigate that topic, I</p> <p>12 really didn't think it was inside the scope.</p> <p>13 Q. You testified earlier that the reason</p> <p>14 some Pharmacia executives might have had</p> <p>15 documents prior to September 2001 was that they</p> <p>16 might have saved those documents themselves, do</p> <p>17 you recall that testimony?</p> <p>18 A. I think I indicated that if you had</p> <p>19 e-mails from those executives prior to 2001 you</p> <p>20 asked me why they might exist still and I</p> <p>21 suggested that they might have a filing system</p> <p>22 like a PST that I described that is outside of</p> <p>23 the e-mail environment and so it can be saved</p> <p>24 separately from e-mail.</p> <p>25 Q. Are there any other potential reasons</p>	<p>1 Gramling</p> <p>2 testified to.</p> <p>3 Q. And were any of their assistants'</p> <p>4 computer systems searched in order to produce</p> <p>5 documents in this litigation?</p> <p>6 A. Not as far as I know.</p> <p>7 Q. Now, how was it determined that the</p> <p>8 80 individuals' documents would be searched?</p> <p>9 MR. WEISS: Objection to the form of the</p> <p>10 question. That answer is beyond the scope</p> <p>11 of this 30(b)(6) deposition.</p> <p>12 Q. Do you know why the assistants for</p> <p>13 Hassan and Cox and Goran Ando were not searched?</p> <p>14 A. I do not know.</p> <p>15 Q. Do you know whether there were --</p> <p>16 what did you do to figure that out?</p> <p>17 A. I'm sorry, figure out that I don't</p> <p>18 know?</p> <p>19 Q. Right.</p> <p>20 A. I'm sorry, can you go back a little</p> <p>21 bit. I'm sort of confused.</p> <p>22 Q. Sure. You just testified that the</p> <p>23 assistants for Hassan and Cox and Ando, their</p> <p>24 computer systems were not searched for the</p> <p>25 purposes of producing documents in this</p>



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February 28, 2011

<p>1 Gramling 2 litigation, correct? 3 A. Correct. 4 Q. How did you come to that 5 determination? 6 A. I think because this morning we went 7 ahead and looked at Ms. Dreydoppel's and tried to 8 do some investigation with respect to her and 9 that's the only assistant that I did any 10 searching on. So I just assumed that those other 11 two fell outside of it. 12 MS. GMITRO: Josh, are you willing to 13 produce any documents that are in any 14 custodial files that may have been 15 maintained for the assistants that we 16 identified? 17 MR. WEISS: We can discuss it off the 18 record. But as I've said before, the 19 conversation should start with the 20 question of whether or not we have the 21 files. So as we've already -- as Mr. 22 Gramling has advised you, we don't have 23 any custodian files for Mrs. Dreydoppel so 24 it's a non-issue. 25 MR. SAHAM: Can you just do the same</p>	<p>65 1 Gramling 2 need to be saved for? 3 MR. WEISS: Objection to the form of 4 the question. It assume facts not in 5 evidence. 6 A. It might not have to be saved at all. 7 When I mean adverse events I mean an official 8 report of an adverse event that a healthcare 9 provider not send to Pfizer. I didn't mean -- 10 and if I did, I didn't mean to testify that any 11 reference to adverse events makes it subject to 12 FDA regulation. 13 Q. And do you know whether there are any 14 processes for determining whether an e-mail would 15 be subject to an FDA regulation? 16 MR. WEISS: Object to the form of the 17 question. 18 A. I think if I understand your question 19 right, if for example today someone e-mailed me 20 who was using a Pfizer product and indicated that 21 they had some problem with a drug, that might 22 qualify as having to report it. Does it qualify 23 as being an actual adverse event, I don't think 24 so. I think there has to be some official filing 25 but it's really outside sort of my scope or the</p>
<p>66 1 Gramling 2 search for the same issues for the other 3 two folks. 4 MR. WEISS: We will address whether 5 we have the other documents and then we 6 will address the question as to whether or 7 not we will produce them. 8 MR. SAHAM: Let us know if the answer 9 is no and you'll tell us that. 10 MS. GMITRO: Yes. 11 Q. Earlier today you testified broadly 12 about FDA regulations that may have required 13 Pfizer to retain documents, do you recall that 14 discussion generally? 15 A. I do generally, yes. 16 Q. And you mentioned that examples of 17 situations that might require the retention of 18 documents include documents related to clinical 19 studies or adverse events, do you recall that 20 testimony? 21 A. I do. 22 Q. And if there were e-mail that was 23 sent to or from Hassan or Goran Ando or Carrie 24 Cox concerning adverse events related to, for 25 example, Celebrex, how long would those documents</p>	<p>68 1 Gramling 2 knowledge that I have about reporting really what 3 the FDA asks of us on a regular basis. 4 Q. Do you know whether there were any 5 computer systems or documents of Hassan's or 6 Goran Ando's or Carrie Cox's that were preserved 7 pursuant to an FDA regulation between the period 8 2000 to 2001? 9 A. I would not know that. 10 Q. Do you know who would know? 11 A. I don't know if anyone would know 12 that. 13 Q. Do you know what ESI is? 14 A. Yes, I do. 15 Q. Electronically stored information, is 16 that correct? 17 A. Correct. 18 Q. Do you know when Hassan's September 19 2000 through -- strike that. Do you know when 20 Hassan's 2000 through September 2001 ESI was 21 deleted, if that's the case? 22 MR. WEISS: Objection to the form of 23 the question. Assumes facts not in 24 evidence. 25 A. I do not know if it was deleted so I</p>



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<p>69</p> <p>1 Gramling</p> <p>2 don't know the time period.</p> <p>3 Q. Do you know whether Pfizer still</p> <p>4 maintains any of Hassan's ESI from 2000 through</p> <p>5 September 2001?</p> <p>6 A. I do.</p> <p>7 Q. Do they still have some of his ESI</p> <p>8 for that time period?</p> <p>9 A. I know we've produced data for Mr.</p> <p>10 Hassan and I believe the numbers are 3,000 or so</p> <p>11 documents, and so to the extent that is his ESI,</p> <p>12 that's the extent of which we have it.</p> <p>13 Q. And how did you determine that?</p> <p>14 A. I mentioned that I talked to Keysha</p> <p>15 beforehand and she has made some significant</p> <p>16 efforts over the last couple of months to try to</p> <p>17 do an audit trail of discovery that was done from</p> <p>18 this time period 2003 forward.</p> <p>19 And part of that investigation</p> <p>20 included providing for me the numbers of the</p> <p>21 documents that are stored on our vendor's website</p> <p>22 related to these individuals that are subject to</p> <p>23 the notice. And so as part of that</p> <p>24 investigation, she just -- she gave me the</p> <p>25 numbers of what was reviewed with respect to Mr.</p>	<p>71</p> <p>1 Gramling</p> <p>2 MR. WEISS: Objection to the form of</p> <p>3 the question.</p> <p>4 A. Just so I understand, they were</p> <p>5 obviously preserved, but you mean preserved</p> <p>6 before April 16th, 2003?</p> <p>7 Q. At any time in April 2003.</p> <p>8 A. There are documents that were</p> <p>9 preserved after April 2003 for all three of these</p> <p>10 individuals.</p> <p>11 THE VIDEOGRAPHER: Five minutes.</p> <p>12 Q. Do you know when their documents</p> <p>13 began to be preserved?</p> <p>14 A. I do not.</p> <p>15 Q. Do you know who would know that?</p> <p>16 A. I do not.</p> <p>17 Q. You testified before that you didn't</p> <p>18 know whether Hassan's pre-September 2001 ESI was</p> <p>19 deleted, do you recall that testimony?</p> <p>20 A. I do not know when his ESI was</p> <p>21 deleted, if it was deleted pre-September 2001,</p> <p>22 that's correct.</p> <p>23 Q. And what steps can you take in order</p> <p>24 to try to find out?</p> <p>25 A. To find out that his e-mail was not</p>
<p>70</p> <p>1 Gramling</p> <p>2 Hassan as well as with respect to what was</p> <p>3 produced in this particular litigation.</p> <p>4 Q. Did she do the same thing with</p> <p>5 respect to Goran Ando as well?</p> <p>6 A. She did.</p> <p>7 Q. Did the audit trail she tried to</p> <p>8 create indicate whether either Ando or Hassan's</p> <p>9 documents were preserved following the initiation</p> <p>10 of this action in April 2003?</p> <p>11 MR. WEISS: Objection to the form of</p> <p>12 the question. At what point?</p> <p>13 MS. GMITRO: I said April 2003.</p> <p>14 MR. WEISS: I understand, but at any</p> <p>15 point?</p> <p>16 MS. GMITRO: I mean specifically</p> <p>17 April 2003 just preserved.</p> <p>18 MR. WEISS: Any of those three?</p> <p>19 MS. GMITRO: Yes.</p> <p>20 A. I'm sorry, could you ask the question</p> <p>21 again.</p> <p>22 Q. Did the audit trail that Keysha tried</p> <p>23 to construct indicate whether any of Hassan's or</p> <p>24 Goran Ando's documents were preserved as of the</p> <p>25 initiation of this action in April 2003?</p>	<p>72</p> <p>1 Gramling</p> <p>2 deleted?</p> <p>3 Q. To find out what happened to his</p> <p>4 pre-2001 ESI.</p> <p>5 A. I think if I understand this</p> <p>6 question. I made -- when we tried to do our</p> <p>7 investigation, to recreate these audit events, we</p> <p>8 did not come up with any audit report indicating</p> <p>9 that information had been deleted, and so I think</p> <p>10 that carries back as far forward and as far back</p> <p>11 as possible, which would include the time frame</p> <p>12 that you just suggested. I see no record where I</p> <p>13 can point to you and say this is the date that</p> <p>14 either -- that any of these people's information</p> <p>15 was deleted.</p> <p>16 Q. And the audit record that you've</p> <p>17 tried to come up with, are there any holes in</p> <p>18 that record? By holes, I mean are there any</p> <p>19 portions where you just don't know what was</p> <p>20 happening to the computer systems at that time?</p> <p>21 MR. WEISS: Objection to the form of</p> <p>22 the question.</p> <p>23 A. I don't know exactly what you mean by</p> <p>24 holes but let me give you an example. As part of</p> <p>25 this investigation we try to go back to an old</p>



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<p>73</p> <p>1 Gramling</p> <p>2 database that the IT group kept that essentially</p> <p>3 was a ticket of what their assets -- what they</p> <p>4 did with their assets as a particular time.</p> <p>5 What I mean by that is an individual</p> <p>6 might turn in his or her computer when they left.</p> <p>7 And that record would be kept to indicate whether</p> <p>8 that computer was repurposed, if it was sent to a</p> <p>9 charitable organization or it was discarded. And</p> <p>10 in our audit efforts we went back to determine</p> <p>11 whether there was any indication about the assets</p> <p>12 of these three individuals and we did not find a</p> <p>13 particular ticket associated with these three</p> <p>14 post April 16th, 2003.</p> <p>15 And so our investigation turned up</p> <p>16 nothing on that front, but to me that's no</p> <p>17 indication that there was ever any information</p> <p>18 deleted. I couldn't point you to a record</p> <p>19 indicating that.</p> <p>20 Q. And were you -- did you look at any</p> <p>21 information or conduct any investigation about</p> <p>22 what happened to Fred Hassan's computer systems</p> <p>23 or Goran Ando's computer systems prior to April</p> <p>24 2003?</p> <p>25 A. I did not. I mean the resources</p>	<p>75</p> <p>1 Gramling</p> <p>2 Q. And you already described the process</p> <p>3 you undertook in order to try to determine what</p> <p>4 happened to Mr. Hassan's, is that the same</p> <p>5 process that you followed to look to see what</p> <p>6 happened with Mr. Ando's ESI as well?</p> <p>7 A. Correct.</p> <p>8 Q. And again am I correct to say that</p> <p>9 you do not have a record of what happened to Mr.</p> <p>10 Ando's ESI prior to April 2003?</p> <p>11 A. That's correct. Nor do I have a</p> <p>12 record after 2003.</p> <p>13 Q. Did you talk to anyone at Pharmacia</p> <p>14 Corporation who would know what happened to</p> <p>15 Hassan's ESI before the merger?</p> <p>16 MR. WEISS: Objection to the form of</p> <p>17 the question.</p> <p>18 A. I did not.</p> <p>19 Q. Did you talk to anyone at Pharmacia</p> <p>20 who would know what happened to Mr. Ando's ESI</p> <p>21 prior to the merger?</p> <p>22 MR. WEISS: Object to the form of the</p> <p>23 question.</p> <p>24 A. I'm a little confused by what you</p> <p>25 mean by at Pharmacia. You mean someone who may</p>
<p>74</p> <p>1 Gramling</p> <p>2 within my purview are Pfizer-related, and so to</p> <p>3 the extent that there was any information</p> <p>4 available in 2003, and there would be a ticket as</p> <p>5 I suggested based on that, that's where my</p> <p>6 investigation had to go. I know I need to go</p> <p>7 back to 2001 to determine whether Pharmacia had a</p> <p>8 similar policy in place on whether to delete any</p> <p>9 of his information.</p> <p>10 Q. Do you know anyone who is at Pfizer</p> <p>11 now or who was at Pfizer who would know what</p> <p>12 happened with the computer systems at Pfizer</p> <p>13 Corporation?</p> <p>14 MR. WEISS: Objection. Object to</p> <p>15 form. Asked and answered.</p> <p>16 A. I do not.</p> <p>17 THE VIDEOGRAPHER: The time is 12:26</p> <p>18 p.m. and we're going off the record.</p> <p>19 (Testimony continues on record off</p> <p>20 the tape.)</p> <p>21 BY MS. GMITRO:</p> <p>22 Q. I'm going to ask specific questions</p> <p>23 with regard to Goran Ando. Do you know whether</p> <p>24 Goran Ando's pre-September 2001 ESI was deleted?</p> <p>25 A. I do not know.</p>	<p>76</p> <p>1 Gramling</p> <p>2 have been employed at Pharmacia who is no longer?</p> <p>3 Q. Yes.</p> <p>4 A. I did not speak to any previous</p> <p>5 employees at Pharmacia to determine what happened</p> <p>6 to ESI.</p> <p>7 Q. Why didn't you speak to anyone at</p> <p>8 Pharmacia?</p> <p>9 A. I mean I don't know, I'm not sure,</p> <p>10 why didn't I?</p> <p>11 Q. In order to make an effort to</p> <p>12 understand what happened to Mr. Hassan's or</p> <p>13 Ando's ESI prior to the merger with Pfizer, why</p> <p>14 didn't you speak with anyone at Pharmacia</p> <p>15 Corporation?</p> <p>16 A. My goal --</p> <p>17 MR. WEISS: I'm going to object to</p> <p>18 the form of the question.</p> <p>19 A. My goal was generally to try to</p> <p>20 determine with a reasonable effort what had</p> <p>21 occurred to the information that was in our</p> <p>22 possession, custody and control. Whether that</p> <p>23 information somehow changed form in 2001 was not</p> <p>24 within the scope of what I thought I would be</p> <p>25 testifying about today.</p>



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<p style="text-align: right;">77</p> <p>1 Gramling</p> <p>2 Q. Looking back at Exhibit number 430,</p> <p>3 do you see that the topic refers to the location,</p> <p>4 the replacement, removal, destruction, copying or</p> <p>5 imaging of the computers used by the individuals</p> <p>6 we've been talking about during their employment</p> <p>7 at Pharmacia and Upjohn as well as Pharmacia</p> <p>8 Corporation and Pfizer?</p> <p>9 A. I do see that.</p> <p>10 Q. How did you determine that you would</p> <p>11 not be testifying about what happened to their</p> <p>12 computer systems at Pharmacia and Upjohn or</p> <p>13 Pharmacia Corporation?</p> <p>14 MR. WEISS: Objection to the form of</p> <p>15 the question. Mischaracterizes and</p> <p>16 misstates the witness's prior testimony.</p> <p>17 A. All three of these individuals were</p> <p>18 Pharmacia employees at the time in 2003 when the</p> <p>19 merger occurred. So to the extent that they had</p> <p>20 any information available from Pharmacia, that</p> <p>21 information could possibly have been integrated</p> <p>22 into the Pfizer environment. So they were</p> <p>23 employees up to April 15th, 2003, and to the</p> <p>24 extent that I was able to look at the migration</p> <p>25 efforts as I suggested with reading Rich's</p>	<p style="text-align: right;">79</p> <p>1 Gramling</p> <p>2 Q. And do you know whether there was any</p> <p>3 information or computer systems of Hassan's or</p> <p>4 Goran Ando's that were not migrated?</p> <p>5 A. I do not know whether there was.</p> <p>6 Q. Do you know who would know?</p> <p>7 A. Well, when I did my investigation I</p> <p>8 went to the source, which was -- when you say</p> <p>9 computer systems for Hassan, I assume you mean</p> <p>10 their computer. And the source that I went to</p> <p>11 was as I've described that ticket process to</p> <p>12 determine whether that asset was either</p> <p>13 repurposed or used for some other thing in my</p> <p>14 investigation. So we didn't have a record of</p> <p>15 that.</p> <p>16 Q. Was that source -- is there a</p> <p>17 database or can you describe it more fully,</p> <p>18 please?</p> <p>19 A. Yes, I would describe it as a</p> <p>20 database that kind of logs, as you can imagine</p> <p>21 there's kind of with the technology sort of being</p> <p>22 updated, there's kind of constant movement. So</p> <p>23 to the extent that IT has to keep track of older</p> <p>24 computers, it's done sort of electronically</p> <p>25 through a log.</p>
<p style="text-align: right;">78</p> <p>1 Gramling</p> <p>2 deposition, that's how I tried to prepare myself.</p> <p>3 Q. You said that their information could</p> <p>4 have been possibly integrated during the merger,</p> <p>5 correct?</p> <p>6 A. Yes.</p> <p>7 Q. Why do you say possibly?</p> <p>8 A. I know there was some information</p> <p>9 migrated and that's how we were able to produce</p> <p>10 documents in this case.</p> <p>11 Q. Did you do anything to determine</p> <p>12 whether any information was not migrated?</p> <p>13 MR. WEISS: Object to the form of the</p> <p>14 question. Any information in general?</p> <p>15 Q. Any information that you're referring</p> <p>16 to?</p> <p>17 A. I think I testified that I'm not</p> <p>18 aware of any information being deleted. So the</p> <p>19 information that I was looking for was</p> <p>20 information that was migrated, and to the extent</p> <p>21 that it was migrated and responsive, that's what</p> <p>22 we produced in this case.</p> <p>23 Q. When you say migrated, you mean</p> <p>24 migrated from Pharmacia Corporation to Pfizer?</p> <p>25 A. Correct.</p>	<p style="text-align: right;">80</p> <p>1 Gramling</p> <p>2 Q. Is the earliest date referenced in</p> <p>3 this database 2003?</p> <p>4 MR. WEISS: Object to the form of the</p> <p>5 question.</p> <p>6 A. I don't know the answer to that</p> <p>7 because I was specifically looking for these</p> <p>8 three individuals.</p> <p>9 Q. And what was the earliest date that</p> <p>10 was referenced for these three individuals in</p> <p>11 this database log?</p> <p>12 A. I don't know. There wasn't a</p> <p>13 reference as far as we could tell.</p> <p>14 Q. Do you know whether there was --</p> <p>15 strike that. Does the database indicate at all</p> <p>16 whether the computer systems originally came from</p> <p>17 Pharmacia Corporation?</p> <p>18 MR. WEISS: Object to the form of the</p> <p>19 question.</p> <p>20 A. For these three individuals or just</p> <p>21 generally?</p> <p>22 Q. Generally.</p> <p>23 A. I don't know, again because I had</p> <p>24 pretty limited investigation.</p> <p>25 Q. Is it fair to say that you did not do</p>



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February 28, 2011

<p>81</p> <p>1 Gramling</p> <p>2 anything to determine whether Hassan's</p> <p>3 pre-September 2001 ESI was deleted before the</p> <p>4 April 2003 merger?</p> <p>5 MR. WEISS: Object to the form of the</p> <p>6 question.</p> <p>7 A. I guess I don't distinguish the time</p> <p>8 parameters that you are trying to determine</p> <p>9 whether any of the information was deleted. I</p> <p>10 don't have any information to indicate whether at</p> <p>11 any point the information was deleted. Whether</p> <p>12 it's pre-2000, whether it's pre-today, whether</p> <p>13 it's pre-2001, all of my activities were the</p> <p>14 same.</p> <p>15 Q. Did you have any information about</p> <p>16 Hassan's computer system prior to the pre-2003</p> <p>17 merger?</p> <p>18 MR. WEISS: Object to the form of the</p> <p>19 question.</p> <p>20 A. To the extent that I testified that I</p> <p>21 knew he had a network share that he used e-mail</p> <p>22 and that he likely had a desktop. Yes, I knew</p> <p>23 that.</p> <p>24 Q. Did you have any information dated</p> <p>25 prior to the 2003 merger that would indicate</p>	<p>83</p> <p>1 Gramling</p> <p>2 have had knowledge about systems being migrated</p> <p>3 in and whether there was information deleted,</p> <p>4 that's how I prepared myself for that. But again</p> <p>5 if your question is did I talk to anyone that was</p> <p>6 at Pharmacia at the time, I don't either know</p> <p>7 that individual nor did I talk to that</p> <p>8 individual.</p> <p>9 Q. Do you have any information</p> <p>10 concerning whether any individual other than</p> <p>11 Hassan or Ando deleted information from their</p> <p>12 files prior to the 2003 merger?</p> <p>13 A. I do not have any information.</p> <p>14 Q. Do you know whether any of their</p> <p>15 assistants did or did not delete any of their ESI</p> <p>16 prior to the 2003 merger?</p> <p>17 A. I do not know that.</p> <p>18 Q. Do you know whether Richard Nosseck</p> <p>19 would have that information? If I pronounced his</p> <p>20 name correctly.</p> <p>21 MR. WEISS: Objection. Are you</p> <p>22 asking whether Rich would know if Goran</p> <p>23 Ando went into his e-mail and deleted</p> <p>24 stuff?</p> <p>25 Q. Whether anyone other than Goran Ando</p>
<p>82</p> <p>1 Gramling</p> <p>2 whether or not Hassan deleted any e-mail?</p> <p>3 A. Do I have any information on that</p> <p>4 front? No.</p> <p>5 Q. Again with respect to Mr. Ando, did</p> <p>6 you have any information about whether Mr. Ando</p> <p>7 may or may not have deleted e-mail prior to the</p> <p>8 2003 merger?</p> <p>9 A. I do not know whether they deleted</p> <p>10 information at any period.</p> <p>11 Q. Did you do anything to try to find</p> <p>12 out whether they deleted any information prior to</p> <p>13 the 2003 merger?</p> <p>14 A. I did not talk to anyone specifically</p> <p>15 about a time frame pre-2003, if I'm answering --</p> <p>16 I'm trying to answer your question, I'm just not</p> <p>17 sure if I'm getting there.</p> <p>18 Q. I think we are slowly. Of the people</p> <p>19 that you talked to, was this anyone who would</p> <p>20 have had information prior to the 2003 merger</p> <p>21 concerning whether they did or did not delete</p> <p>22 their e-mail?</p> <p>23 MR. WEISS: Objection to the form of</p> <p>24 the question.</p> <p>25 A. Again, to the extent that Rich would</p>	<p>84</p> <p>1 Gramling</p> <p>2 or Hassan deleted information from their computer</p> <p>3 systems?</p> <p>4 A. I don't know.</p> <p>5 Q. Do you know, am I saying his name</p> <p>6 correctly Nosseck?</p> <p>7 A. That's correct.</p> <p>8 Q. What was Mr. Nosseck's title, if you</p> <p>9 know?</p> <p>10 A. Something like global PT technology</p> <p>11 infrastructure manager, something very</p> <p>12 computer --</p> <p>13 Q. Long-winded.</p> <p>14 A. Yes.</p> <p>15 Q. Do you know how long he was in that</p> <p>16 position?</p> <p>17 A. I think through the migration, and so</p> <p>18 as I suggested, it was a process that lasted over</p> <p>19 two years, and so I think that his role was that</p> <p>20 for those two years post merger.</p> <p>21 Q. Was he hired specifically for the</p> <p>22 purpose of integrating Pharmacia Corporation and</p> <p>23 Pfizer?</p> <p>24 A. I don't think so. I think he had</p> <p>25 been in our business technology prior to that.</p>



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February 28, 2011

<p>85</p> <p>1 Gramling</p> <p>2 Q. Do you know when he began working for</p> <p>3 Pfizer?</p> <p>4 A. He's been there a long time but I</p> <p>5 don't know how long.</p> <p>6 Q. Is he still with the company?</p> <p>7 A. He is.</p> <p>8 Q. Do you know whether he had any</p> <p>9 assistants -- direct assistants in performing his</p> <p>10 function through the merger?</p> <p>11 A. I'm sorry, did he have any</p> <p>12 assistants?</p> <p>13 Q. Direct -- sorry, I don't know</p> <p>14 assistants like in individuals with the title of</p> <p>15 assistant. Let me repeat the question. Other</p> <p>16 than Mr. Nosseck, do you know of anyone else who</p> <p>17 was responsible for the same migration process</p> <p>18 that he was responsible for pursuant to the</p> <p>19 merger?</p> <p>20 A. I do not know any specific names. He</p> <p>21 was kind of the head and I'm sure he had multiple</p> <p>22 people under him conducting the different work</p> <p>23 streams.</p> <p>24 Q. Do you know who was responsible for</p> <p>25 document preservation at Pharmacia Corporation</p>	<p>87</p> <p>1 Gramling</p> <p>2 Q. You also mentioned that there were</p> <p>3 legal holds that were in place at Pharmacia</p> <p>4 Corporation during the time period I mentioned.</p> <p>5 Do you know whether any of those legal holds</p> <p>6 covered documents or computer systems utilized by</p> <p>7 Goran Ando or Fred Hassan?</p> <p>8 A. I'm thinking about it a little bit</p> <p>9 differently than you are. Individuals receive</p> <p>10 legal holds, not computer systems, so Hassan and</p> <p>11 Ando and Cox would receive a legal hold.</p> <p>12 Wherever their information resides that might be</p> <p>13 responsive to that legal hold, they would be</p> <p>14 obligated to save it. So I'm not -- I don't mean</p> <p>15 to split hairs but it's more related to them</p> <p>16 receiving legal holds than it is about a computer</p> <p>17 system being put on hold.</p> <p>18 Q. Do you know whether either of them</p> <p>19 received legal holds between the period of 2000</p> <p>20 and 2003 at Pharmacia Corporation?</p> <p>21 A. I do not.</p> <p>22 Q. Do you know who would know that?</p> <p>23 A. Either counsel here or counsel for</p> <p>24 Pharmacia at the time.</p> <p>25 Q. Is that something that Richard</p>
<p>86</p> <p>1 Gramling</p> <p>2 from 2000 to 2003?</p> <p>3 MR. WEISS: Object to the form of the</p> <p>4 question. Assumes facts not in evidence.</p> <p>5 A. I do not know.</p> <p>6 Q. Do you know whether there was a</p> <p>7 document preservation policy at Pharmacia during</p> <p>8 this time period?</p> <p>9 A. I do know that there was a retention</p> <p>10 policy. I also outside of the scope of this</p> <p>11 deposition know that there were legal holds in</p> <p>12 place at Pharmacia, and so there was a type of</p> <p>13 preservation going on but that's about the extent</p> <p>14 of my knowledge.</p> <p>15 Q. Do you know what the substance of the</p> <p>16 retention policy was at Pharmacia Corporation</p> <p>17 during the same time period I referred to?</p> <p>18 A. I wouldn't be surprised if it was</p> <p>19 really any different than the Pfizer retention</p> <p>20 policy at the time. A broad this is why we</p> <p>21 preserve information. Like I said, I've seen</p> <p>22 their retention policy, I don't know if it's been</p> <p>23 produced here or not. But there was one in place</p> <p>24 and whether -- I don't have any specifics about</p> <p>25 it to distinguish it between the Pfizer one.</p>	<p>88</p> <p>1 Gramling</p> <p>2 Nosseck would know?</p> <p>3 A. No.</p> <p>4 Q. What steps did you take, if any, to</p> <p>5 determine whether there were any legal holds</p> <p>6 governing Mr. Hassan or Mr. Ando at this time?</p> <p>7 A. I didn't take any steps.</p> <p>8 Q. Why not?</p> <p>9 A. I was -- I did not think it was in</p> <p>10 the scope of topic number 1.</p> <p>11 MS. GMITRO: Let's take a quick</p> <p>12 break, we might be finished.</p> <p>13 THE VIDEOGRAPHER: The time is 12:43</p> <p>14 p.m. We're going off the record.</p> <p>15 (Recess taken)</p> <p>16 THE VIDEOGRAPHER: The time is 12:53</p> <p>17 p.m. and we're back on the record.</p> <p>18 BY MS. GMITRO:</p> <p>19 Q. Welcome back. We just have a couple</p> <p>20 of more minutes, then we'll be done. I put in</p> <p>21 front of you Exhibit number 431, which is an</p> <p>22 excerpt from a privilege log prepared by</p> <p>23 defendants in this case. I take it you're</p> <p>24 familiar with privilege logs, right?</p> <p>25 A. I am.</p>



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Edward Gramling

February 28, 2011

<p>89</p> <p>1 Gramling</p> <p>2 (Plaintiffs' Exhibit 431, Excerpt</p> <p>3 from privilege log prepared by defendants,</p> <p>4 was so marked for identification, as of</p> <p>5 this date.)</p> <p>6 Q. If you look at the bottom entry,</p> <p>7 there's two entries, I'm looking at the entry</p> <p>8 beginning with the custodian Steven Geis, do you</p> <p>9 see that?</p> <p>10 A. The last line?</p> <p>11 Q. Yes.</p> <p>12 A. Yes.</p> <p>13 Q. If you look at the basis for entry,</p> <p>14 it says e-mail prepared by or at the direction of</p> <p>15 attorney regarding collection of documents</p> <p>16 regarding the collection of documents or</p> <p>17 electronic files in connection with anticipation</p> <p>18 of litigation," then in parentheses it says</p> <p>19 "Legal hold memorandum." Do you see that?</p> <p>20 A. I do see that.</p> <p>21 Q. The date of this memorandum is dated</p> <p>22 in this log of November 1 of 2000. Do you see</p> <p>23 that?</p> <p>24 A. I do see that.</p> <p>25 Q. Do you know whether this legal hold</p>	<p>91</p> <p>1 Gramling</p> <p>2 MR. WEISS: I have very quick a few</p> <p>3 questions.</p> <p>4 EXAMINATION BY MR. WEISS:</p> <p>5 Q. Mr. Gramling, were custodial</p> <p>6 documents of Fred Hassan produced in this</p> <p>7 litigation?</p> <p>8 A. Yes.</p> <p>9 Q. What is the volume of custodial</p> <p>10 documents from Fred Hassan that were produced in</p> <p>11 this litigation?</p> <p>12 A. We have custodial files from Mr.</p> <p>13 Hassan that total about 4,000 documents. The</p> <p>14 page count of that is somewhere in the 17,000</p> <p>15 that we actually reviewed, but after review I</p> <p>16 think only -- well, actually I know there were</p> <p>17 about 55 documents that were responsive within</p> <p>18 the time parameters that we're talking about,</p> <p>19 which indicates that obviously to some extent his</p> <p>20 material was available for collection, review and</p> <p>21 processing and the determination of what was</p> <p>22 responsive.</p> <p>23 Q. The 55 documents that you reference,</p> <p>24 how many pages did those documents comprise?</p> <p>25 A. It's about 250 pages.</p>
<p>90</p> <p>1 Gramling</p> <p>2 that's being referred to here applied to Hassan</p> <p>3 or Ando during this time period?</p> <p>4 MR. WEISS: Objection to the form of</p> <p>5 the question.</p> <p>6 A. I do not know.</p> <p>7 Q. Did you do anything to try to</p> <p>8 determine whether this legal hold did or did not</p> <p>9 apply to them?</p> <p>10 A. Whether the legal hold in this</p> <p>11 particular entry on this privilege log applied to</p> <p>12 the three individuals?</p> <p>13 Q. Yes.</p> <p>14 A. I did not do anything to determine</p> <p>15 that.</p> <p>16 Q. So you don't know whether Hassan or</p> <p>17 Ando or Ms. Cox for that matter did or did not</p> <p>18 comply with this legal hold if it applied to</p> <p>19 them?</p> <p>20 A. I don't even know what this legal</p> <p>21 hold is referring to so I don't know if they -- I</p> <p>22 don't know if they received it either so I don't</p> <p>23 know if they complied with it either.</p> <p>24 MS. GMITRO: I have no further</p> <p>25 questions.</p>	<p>92</p> <p>1 Gramling</p> <p>2 Q. Were documents -- custodial documents</p> <p>3 of Carrie Cox produced to plaintiffs in this</p> <p>4 litigation?</p> <p>5 A. Again, yes, and approximately 25,000</p> <p>6 pages from Ms. Cox were produced. I think with</p> <p>7 respect to what was collected and reviewed it's</p> <p>8 more in the ballpark of 115,000 that again we</p> <p>9 applied search terms, we applied date parameter,</p> <p>10 we determined what's responsive. Again we're</p> <p>11 saying that a fairly substantial collection was</p> <p>12 done on her custodial imaging.</p> <p>13 Q. The 115,000 pages of documents that</p> <p>14 you referenced actually constitutes what?</p> <p>15 A. It constitutes what was reviewed for</p> <p>16 Ms. Cox. So I don't have the information about</p> <p>17 what that was initially culled down from. We</p> <p>18 think of it in three stages, you have your raw</p> <p>19 data, then you have your review set, then you</p> <p>20 have your produced set.</p> <p>21 In the instance with Ms. Cox, the</p> <p>22 volume that we reviewed was the 115 or so</p> <p>23 thousand that I'm talking about, which usually</p> <p>24 for us means that the raw data was at least</p> <p>25 double that, potentially more, depending on the</p>



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<p>1 Gramling 93</p> <p>2 custodian.</p> <p>3 Q. Are you aware of when the complaint</p> <p>4 in this action was served on Pharmacia</p> <p>5 Corporation?</p> <p>6 A. My understanding was it was served</p> <p>7 after the merger, I think, I don't know if it was</p> <p>8 served April 16th or April 17th.</p> <p>9 Q. And are you aware of whether or not</p> <p>10 Ms. Carrie Cox was named as a defendant in the</p> <p>11 original complaint or complaints in this action?</p> <p>12 A. I do know that she was not named</p> <p>13 until later.</p> <p>14 Q. And later being when?</p> <p>15 A. I think it was October or November of</p> <p>16 that same year.</p> <p>17 Q. And could that circumstance have</p> <p>18 affected the extent to which her documents were</p> <p>19 either collected or preserved?</p> <p>20 A. I have no idea in her particular</p> <p>21 case, but I mean generally just knowing how we</p> <p>22 currently operate, it definitely could</p> <p>23 potentially affect it.</p> <p>24 Q. You were asked a series of questions</p> <p>25 about whether or not you could -- whether or not</p>	<p>1 Gramling 95</p> <p>2 Pfizer, in this instance fairly extraordinary</p> <p>3 measures to try to track down any potential</p> <p>4 server that might have Cox-2-related materials on</p> <p>5 it. And I'll give you a good example, with</p> <p>6 respect to Carrie Cox, there have been multiple</p> <p>7 servers that have been decommissioned, which</p> <p>8 means they were no longer in use. And once Ms.</p> <p>9 Cox was named as a party and it was determined we</p> <p>10 needed to collect her information, there was a</p> <p>11 search to re-engage those databases. And to</p> <p>12 basically plug in each one to go through the</p> <p>13 effort of seeing whether or not information for</p> <p>14 her or any of the other folks were there.</p> <p>15 So I think the effort at looking to</p> <p>16 all servers that may have been decommissioning</p> <p>17 and trying to restore them to see if there's any</p> <p>18 information is fairly indicative of the search</p> <p>19 that we did for these individuals' materials.</p> <p>20 Q. Earlier you testified about an</p> <p>21 investigation that was conducted by members of</p> <p>22 your staff, do you recall that? And I think you</p> <p>23 in particular mentioned that Keysha Dixon had</p> <p>24 been responsible for conducting this</p> <p>25 investigation?</p>
<p>1 Gramling 94</p> <p>2 you investigated the extent to which the three</p> <p>3 individuals at issue here, Carrie Cox, Goran Ando</p> <p>4 or Fred Hassan, deleted their ESI, do you recall</p> <p>5 that series of questions?</p> <p>6 A. I do.</p> <p>7 Q. What could you have done to</p> <p>8 investigate that issue or answer those questions?</p> <p>9 A. Well, I mean if I had their computers</p> <p>10 in front of me today I could potentially do some</p> <p>11 type of forensic analysis to determine whether</p> <p>12 that information had been deleted by them or</p> <p>13 anyone. Since I don't have that, the only source</p> <p>14 frankly is to ask the individuals who I think</p> <p>15 have been deposed by plaintiffs, I think all</p> <p>16 three. But I mean outside of asking them for</p> <p>17 that technology option, I don't see any other way</p> <p>18 to know when the deletion actually occurred.</p> <p>19 Q. Are you aware of whether or not</p> <p>20 efforts were made by Pfizer to collect and review</p> <p>21 legacy Pharmacia documents that were potentially</p> <p>22 responsive in this case?</p> <p>23 A. I do as part of Keysha's</p> <p>24 investigation as well as my discussions with</p> <p>25 Laura Kibbe. We went through, I say we being</p>	<p>1 Gramling 96</p> <p>2 A. Yes.</p> <p>3 Q. That investigation that you</p> <p>4 described, did that investigation include trying</p> <p>5 to answer the questions that were posed in topic</p> <p>6 number 1 of Exhibit 430?</p> <p>7 A. Absolutely. I figure the efforts for</p> <p>8 a couple of months now have been really to try</p> <p>9 to -- let me put it this way, there's been a</p> <p>10 significant amount of turnover in sort of the</p> <p>11 discovery group at Pfizer. And so to try to</p> <p>12 recreate what occurred in 2003/2004/2005, we</p> <p>13 tried to go to our collections teams or to</p> <p>14 retrieve various records that might be associated</p> <p>15 with the collections for individuals implicated</p> <p>16 in this matter.</p> <p>17 Obviously we talked to Laura but</p> <p>18 really kind of going down every possible rabbit</p> <p>19 hole that we could to say what happened on</p> <p>20 April 16th, 2003.</p> <p>21 Q. And notwithstanding those efforts,</p> <p>22 you were unable to come up with an answer?</p> <p>23 MS. GMITRO: Objection.</p> <p>24 A. So with respect to the -- I mean</p> <p>25 obviously I know we produced materials from them.</p>



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<p>1 Gramling</p> <p>2 But one of the issues was to the extent to which</p> <p>3 Matt -- material that was on their desktops might</p> <p>4 be -- were not part of the collection, and I</p> <p>5 think I had suggested earlier in my testimony</p> <p>6 that it doesn't completely surprise me, I'll give</p> <p>7 you a very specific example, I've been at Pfizer</p> <p>8 for two years with my secondment. I am a worker</p> <p>9 bee, and if you look at what's on my desktop</p> <p>10 about what's stored locally, you will see very</p> <p>11 limited documents that are Word documents, maybe</p> <p>12 some PowerPoint presentations and that's it.</p> <p>13 To me when we look at our executives'</p> <p>14 stored information, they're not the ones creating</p> <p>15 documents, they're reviewing documents. They're</p> <p>16 not the ones downloading it onto their local</p> <p>17 drives, traditionally.</p> <p>18 So I think we weren't that surprised</p> <p>19 that there was information that indicated that</p> <p>20 these folks would actually create documents.</p> <p>21 And looking at both their testimony,</p> <p>22 I think it's pretty clear that their information</p> <p>23 was managed by others as well as probably they</p> <p>24 were not in the positions really to have created</p> <p>25 materials. That's my speculation. But our</p>	<p>1 Gramling</p> <p>2 for the documents that are in that 3,843 document</p> <p>3 review set?</p> <p>4 A. I do not know.</p> <p>5 Q. And do you know whether in that</p> <p>6 review set there is any e-mail that is dated</p> <p>7 prior to September of 2001?</p> <p>8 A. I do not know.</p> <p>9 Q. And you testified about documents</p> <p>10 that you had -- review sets that you had for both</p> <p>11 Hassan and Cox. Do you also have a review set</p> <p>12 for Goran Ando as well?</p> <p>13 A. We have a very limited set of about</p> <p>14 600 documents. And none of those were determined</p> <p>15 to be responsive is my understanding.</p> <p>16 Q. Do you know where those documents</p> <p>17 came from?</p> <p>18 MR. WEISS: Objection to the form of</p> <p>19 the question.</p> <p>20 A. I do not know specifically where they</p> <p>21 came from.</p> <p>22 Q. Do you know whether any of those</p> <p>23 documents relate to the time period prior to</p> <p>24 September 2001?</p> <p>25 A. I do not. I mean at some point they</p>
<p>1 Gramling</p> <p>2 investigation included all those sort of efforts</p> <p>3 to see if we can create our efforts in proving</p> <p>4 that we went through some very reasonable steps</p> <p>5 to get to this point that we went through.</p> <p>6 MR. WEISS: I have other questions.</p> <p>7 MS. GMITRO: I have a couple of quick</p> <p>8 follow-up questions.</p> <p>9 EXAMINATION (Continued)</p> <p>10 BY MS. GMITRO:</p> <p>11 Q. You just testified that for Fred</p> <p>12 Hassan, Pfizer's in possession of about 4,000</p> <p>13 documents or 17,000 pages of materials for him,</p> <p>14 is that correct?</p> <p>15 MR. WEISS: Object to the form of the</p> <p>16 question. Mischaracterizes the witness's</p> <p>17 testimony.</p> <p>18 A. So there's actually 3,843 documents</p> <p>19 on our review platform of Mr. Hassan's, that's</p> <p>20 about 17,000 pages. That's what we call the</p> <p>21 review set. Those were reviewed and I guess I</p> <p>22 don't know what the -- how responsiveness was</p> <p>23 determined in this case, but based on that review</p> <p>24 set the number was produced that I suggested.</p> <p>25 Q. Do you know what the date range is</p>	<p>1 Gramling</p> <p>2 were determined to be non-responsive so I don't</p> <p>3 know how that determination was made, if that's a</p> <p>4 date range or not. I just don't know.</p> <p>5 MS. GMITRO: I have no further</p> <p>6 questions.</p> <p>7 THE VIDEOGRAPHER: The time is 1:06</p> <p>8 p.m. This ends tape number two.</p> <p>9 (Time noted: 1:06 p.m.)</p> <p>10</p> <p>11</p> <p>12 Subscribed and sworn to</p> <p>13 before me this _____ day of _____, 2011.</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>



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<p>INDEX</p> <p>Witness</p> <p>EDWARD GRAMLING</p> <p>Page 4</p> <p>EXHIBITS</p> <p>Plaintiffs'</p> <p>430 Notice of 30(b)(6) deposition 8</p> <p>431 Excerpt from privilege log 89</p> <p>prepared by defendants</p> <p>INFORMATION REQUESTED</p> <p>Page Line</p> <p>35 23</p> <p>47 17</p> <p>65 25</p> <p>oOo</p>	<p>DEPOSITION ERRATA SHEET</p> <p>Our Assignment No.: 318030</p> <p>Case Caption: Alaska Electrical Pension Fund v. Pharmacia Corporation</p> <p>DECLARATION UNDER PENALTY OF PERJURY</p> <p>I declare under penalty of perjury that I have read the entire transcript of my Deposition taken in the captioned matter or the same has been read to me, and the same is true and accurate, save and except for changes and/or corrections, if any, as indicated by me on the DEPOSITION ERRATA SHEET hereof, with the understanding that I offer these changes as if still under oath.</p> <p>EDWARD GRAMLING</p> <p>Subscribed and sworn to on the ____ day of _____, 2011 before me.</p> <p>Notary Public, in and for the State of _____.</p>	<p>DEPOSITION ERRATA SHEET</p> <p>CERTIFICATION</p> <p>I, Lisa Rosenfeld, a Shorthand Reporter and Notary Public, within and for the State of New York, do hereby certify:</p> <p>That I reported the proceedings in the within entitled matter, and that the within transcript is a true record of such proceedings.</p> <p>I further certify that I am not related, by blood or marriage, to any of the parties in this matter and that I am in no way interested in the outcome of this matter.</p> <p>IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of _____, 2011.</p> <p>LISA ROSENFELD</p>	<p>DEPOSITION ERRATA SHEET</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>SIGNATURE: _____ DATE: _____</p> <p>EDWARD GRAMLING</p>	<p>DEPOSITION ERRATA SHEET</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>Page No. ____ Line No. ____ Change to: _____</p> <p>Reason for change: _____</p> <p>SIGNATURE: _____ DATE: _____</p> <p>EDWARD GRAMLING</p>



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Edward Gramling

February 28, 2011

<p>105</p> <p>1 DEPOSITION ERRATA SHEET</p> <p>2 Page No.____Line No.____Change to:_____</p> <p>3 _____</p> <p>4 Reason for change:_____</p> <p>5 Page No.____Line No.____Change to:_____</p> <p>6 _____</p> <p>7 Reason for change:_____</p> <p>8 Page No.____Line No.____Change to:_____</p> <p>9 _____</p> <p>10 Reason for change:_____</p> <p>11 Page No.____Line No.____Change to:_____</p> <p>12 _____</p> <p>13 Reason for change:_____</p> <p>14 Page No.____Line No.____Change to:_____</p> <p>15 _____</p> <p>16 Reason for change:_____</p> <p>17 Page No.____Line No.____Change to:_____</p> <p>18 _____</p> <p>19 Reason for change:_____</p> <p>20 Page No.____Line No.____Change to:_____</p> <p>21 _____</p> <p>22 Reason for change:_____</p> <p>23 _____</p> <p>24 SIGNATURE:_____DATE:_____</p> <p>25 EDWARD GRAMLING</p>	



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EXHIBIT 77

PHARMACIA CORP /DE/
Reported by
COX CARRIE SMITH

FORM 4
(Statement of Changes in Beneficial Ownership)

Filed 09/11/00 for the Period Ending 08/31/00

Address	100 ROUTE 206 NORTH PEAPACK, NJ 07977
Telephone	9089018000
CIK	0000067686
SIC Code	2800 - Chemicals & Allied Products
Industry	Major Drugs
Sector	Healthcare
Fiscal Year	12/31

U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 4

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
Section 17(a) of the Public Utility Holding Company Act of 1935 or
Section 30(f) of the Investment Company Act of 1940

☐ Check box if no longer subject of Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

1. Name and Address of Reporting Person*

Cox	Carrie	Smith
(Last)	(First)	(Middle)
100 Route 206 North		
(Street)		
Peapack	New Jersey	07977
(City)	(State)	(Zip)

2. Issuer Name and Ticker or Trading Symbol

Pharmacia Corporation
PHA

3. IRS Identification Number of Reporting Person, if an Entity (Voluntary)

4. Statement for Month/Year

August 2000

5. If Amendment, Date of Original (Month/Year)

6. Relationship of Reporting Person to Issuer
(Check all applicable)

☐ Director ☐ 10% Owner
☒ Officer (give title below) ☐ Other (specify below)

Executive Vice President

7. Individual or Joint/Group Filing (Check applicable line)

☒ Form filed by one Reporting Person
☐ Form filed by more than one Reporting Person

Table I -- Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

[illegible]

* If the Form is filed by more than one Reporting Person, see Instruction 4(b)(v).

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

(Print or Type Responses)

(Over)

(Form 4-07/99)

FORM 4 (continued)

Table II -- Derivative Securities Acquired, Disposed of, or Beneficially Owned

(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conver- sion or Exer- cise Price of Deriv- ative Secur- ity	3. Trans- action Date (Month/ Day/ Year)	4. Trans- action Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) (A) (D)	6. Date Exercisable and Expiration Date (Month/Day/Year) Date Expira- tion Date	7. Title and Amount of Underlying Securities (Instr. 3 and 4) Amount or Number of Shares	8. Price of Deriv- ative Secur- ity (Instr. 5)	9. Number of Deriv- ative Secur- ities Bene- ficially Owned at End of Month (Instr. 4)	10. Owner- ship Form of Deriv- ative Secur- ity: Direct (D) or In- direct (I) (Instr. 4)	11. Nature of Bene- ficial Owner- ship (Instr. 4)
Option (right to buy)	\$28.991	8/25/00	M	51,700	3/31/00 (1) 8/27/07	Common Stock	51,700			
Option (right to buy)	\$51.5938	6/1/00	A V	125,000	(2) 6/1/10	Common Stock	125,000	599,050	D	

Explanation of Responses:

(1) Exercisable on or prior to such date.

(2) Options become exercisable for one-third of the shares on the first, second and third anniversary of the grant date.

/s/ Don Schmitz

9/11/00

**Signature of Reporting Person

Date

*Don Schmitz, attorney-in-fact for Carrie Smith Cox

* Executed pursuant to a Power of Attorney ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations.

See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed.
If space provided is insufficient, see Instruction 6 for procedure.

End of Filing

Powered By 

PHARMACIA CORP /DE/

Reported by
COX CARRIE SMITH

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 12/11/00 for the Period Ending 11/30/00

Address	100 ROUTE 206 NORTH PEAPACK, NJ 07977
Telephone	9089018000
CIK	0000067686
SIC Code	2800 - Chemicals & Allied Products
Industry	Major Drugs
Sector	Healthcare
Fiscal Year	12/31

U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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11/00

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☐ Director ☐ 10% Owner
☒ Officer (give title below) ☐ Other (specify below)

Executive Vice President

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☒ Form filed by one Reporting Person
☐ Form filed by more than one Reporting Person

(Form 4-07/99)

FORM 4 (continued)

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(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conver- sion or Exer- cise Price of Deriv- ative Secur- ity	3. Trans- action Date (Month/ Day/ Year)	4. Trans- action Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) (A) (D)	6. Date Exercisable and Expiration Date (Month/Day/Year) Date Expiration	7. Title and Amount of Underlying Securities (Instr. 3 and 4) Amount or Number of Shares	8. Price of Deriv- ative at End Month (Instr. 5)	9. Number of Deriv- ative Secur- ities Benefi- cially Owned at End Month (Instr. 4)	10. Owner- ship Form of Deriv- ative Secur- ity: Direct (D) or In- direct (I) (Instr. 4)	11. Nature of Bene- ficial Owner- ship (Instr. 4)
Option (right to buy)	\$28.991	11/2/00	M	9,091	3/31/00 (2) 8/27/07	Common Stock 9,091				
Option (right to buy)	\$57.84	11/2/00	A	6,217	3/31/00 (2) 8/27/07	Common Stock 6,217				
Option (right to buy)	\$28.991	11/7/00	M	50,000	3/31/00 (2) 8/27/07	Common Stock 50,000	519,959	D		

Explanation of Responses:

- (1) Shares surrendered in payment of option exercise price on reload transaction.
(2) Exercisable on or prior to such date.

/s/ Don Schmitz

12/11/00

**Signature of Reporting Person

Date

*Don Schmitz, attorney-in-fact for Carrie Smith Cox

* Executed pursuant to a Power of Attorney ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations.

See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed.
If space provided is insufficient, see Instruction 6 for procedure.

End of Filing

EXHIBIT 78

Date: April 3, 2000

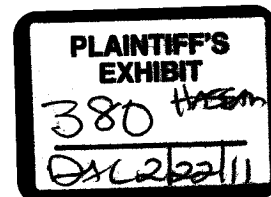
To: Pat Kelly
Randi Goldmann

From: Will Kane

Re: Co-promote Issues

As requested, selected examples of operating difficulties and challenges follow.

1. Inexperience: Searle marketing possesses little substantive experience resulting in bad decisions, inefficiency, redundancy and expense. Selected examples:
 - POA 2 Development: Searle marketing insisted that there was a wealth of new data to strengthen promotional claims in print pieces and programs. Searle, Pfizer and LLNS invested considerable time and staffing to review all the so-called new data. There wasn't any. I knew that because I know the data. The Searle marketers, with a tenure of approximately six months on the team, have little if any knowledge and understanding of the clinical data. They rely on Al Bello, Searle rheumatologist, who lacks substantive knowledge of the data and little insight as to data application in promotion. Despite Pfizer's attempt to guide the POA development, Searle ignored our direction. For example, off-label claims regarding onset of pain relief with Celebrex were inserted into the pieces. These claims were obviously not going to survive review committee scrutiny, and they didn't. Additionally, the unnecessary insertion of ill-fated claims and their subsequent removal requires unnecessary agency time and expense. It now costs between \$400K and \$500K per visual aid (development only). The core Slim Jim costs between \$300K and \$400K.
 - American Association of Orthopedic Surgeons: The promotional dinner program designed by Searle marketing bordered on embarrassing. The event, known as the Celebrex Night of Champions, featured famous athletes (Terry Bradshaw, Johnny Bench, Gary Player and Clyde Drexler). The celebrity athletes were to participate in a reception prior to the dinner at which time they would pose with physicians and their guests for pictures and autographs. Terry Bradshaw was Master of Ceremonies for the Celebrex part of the event. The event was at Disney's Wide World of Sports complex in Orlando. The target attendance was 750 physicians and 750 guests; the cost approached \$700K, driven in part by the indoor blimp and the ice sculptures. Invitations were to be delivered by representatives. In addition to Terry Bradshaw, Dr. Paul Wright, an Orthopedic Surgeon who has telephoned Bill Steere's office numerous times to seek support for his Senior PGA physician network business, spoke about his experience treating athletes, and Dr. Evan Ekman, an Orthopedic Surgeon, made the Celebrex promotional presentation. Because Searle did not want Merck to find out about the event, they deliberately waited until two weeks before the event to send the invitations to representatives. Rick Burch has called that decision



"just stupid." Not surprisingly, the turnout was disappointing, just 206 doctors. Guests outnumbered doctors nearly 3:1. The cost per physician was nearly \$3K. All the celebrities, except Johnny Bench, were one hour late. The physicians failed to deliver strong presentations. Searle blames Pfizer marketing for not doing its job. Pfizer's guidance was ignored. Searle insisted on day to day management of the project. Searle had one full-time marketer devoted solely to this event.

- Advocate Development/Speaker Training: Searle recognized pre-launch that a sizable, strong cadre of MD advocates was important to a successful launch of Celebrex. Pfizer would have had a speakers bureau but probably not as large as Searle proposed. Since the launch, however, the advocate development effort has fallen into a sad state of disarray. The Tier 1 advisors have met several times but have grown increasingly impatient since the meetings lack any depth. [Several of these advocates participate on the selection committee for the Pfizer Visiting Professor Program in Rheumatology. When in NY to assist Pfizer in the selection of winners, the advocates communicated their disappointment with Searle: advisor recommendations regarding clinical studies are ignored, follow through is poor, their value seems questionable.] While employing over 1300 advocates seemed advantageous at launch, the lack of consistent interaction and direction has led to a lack of consistency and conviction in addressing the challenges that face Celebrex during speaking engagements (sulfonamide contraindication, lack of acute pain indication, dosing flexibility, etc). Pfizer has raised concern about this persistently; we recommended that the advocates be separated by specialty to build better relationships and more substantive interaction. We proposed speaker training meetings be conducted in early 2000 to prepare the speakers for POA 1 programs. Searle disagreed. Instead of speaker programs, Searle wanted to conduct over 200 consultant roundtables at which MSLs and MAMs could present off-label data. Pfizer marketing informed Searle that those programs would not pass review committee scrutiny, plus the roundtables did not serve the business as well as solid speaker training meetings would. (The speaker training would include a complete product and competitor review as well as Q&A to ensure speakers were knowledgeable about the range of issues that may arise in the local programs that they conduct). Nevertheless, Searle insisted on consultants meetings. Pfizer was told that Searle Legal had o.k.'d the program. In actuality, Searle Legal did not o.k. the program. The Searle attorneys agreed that consultants meetings were o.k., but not over 200 involving over 2000 physicians. Valuable time was lost. [Given the delays and the need for relationship building at the local level, Pfizer moved quickly to establish and fund the Celebrex District Advisory Panel Initiative by which each district has been provided \$25K to establish a district advisory panel. Searle saw no value in the program and opted out.] At long last in February, Searle agreed to do the Speaker Training meetings and to allow Pfizer to take the lead. Searle Global Meetings, the only means by which meeting sites can be arranged, was directed to find properties for seven meetings (one for each Pfizer region) in May, the earliest month in which the programs could be conducted successfully. The meetings group took an excessively long time since properties were not readily available (ultimately they secured mediocre properties). Then in early March, Searle decided that the CLASS

data needed to be disseminated ASAP in mid-April at the ACP. In order to accomplish this, Searle unilaterally reclassified the speaker training meetings into consultants meetings and informed Pfizer that the meetings must be held in April. However, in order for the meetings to be conducted as consultants meetings, the number of attendees would need to be reduced to satisfy Legal. Upon my return from vacation, I learned of all the changes and intervened to lobby aggressively for the Speaker Training meetings. In my dialogue with Searle marketing, it became clear (again) that their inexperience was compromising another program. They were unaware of the differences between consultants' meetings and speaker training meetings; they were also unaware of the plan to disseminate CLASS data. After an unpleasant dialogue with Searle marketing, Pfizer did prevail, but by this time the meetings were just over one month away. Invitations have not yet been printed. Time was insufficient to allow field representatives to invite doctors which has soured (a little) the working relationship between Pfizer sales and marketing. This saga underscores the inefficiency that has resulted in costly delays. Moreover, the battle over the presentations has just begun.

2. Inefficiency: Searle marketing has maintained five times as many marketing managers as Pfizer. Poor communication at Searle results in confusion and chaos. Selected examples:

- Press Releases: Searle seems to issue a press release daily. Searle External Affairs leads all efforts, including drafting all releases. (Chandler Chicco was fired by Searle, although Searle has not yet notified Chandler Chicco.) Searle Marketing is tangentially involved and almost always at the last minute. Searle External Affairs forwards the release to Pfizer marketing where we correct all the mistakes; it seems every release has one or two. Aside from our corrections of factual mistakes, our recommendations about the content, structure or use of the release are typically ignored. At the end of February, several releases were submitted to highlight Celebrex promotion of the Liquid.com Senior PGA Golf Tournament in Sarasota, FL. One release focused on the benefits that patients experienced thanks to Celebrex. Obviously a great opportunity to spotlight the arthritis pain-relieving efficacy of Celebrex. Unfortunately, the release spotlighted the reduced risk of ulcers with Celebrex. As it happened, Judy Robertson was in NYC so I had her sit in the RC meeting. I expressed my concern with the ulcer language and my preference for strong language about Celebrex efficacy. Searle External Affairs rejected my input, so I turned to Judy and asked her if she felt that the release was on strategy. She agreed that it was not on strategy and had to debate her own External Affairs group about the marketing strategy for Celebrex. Prior to the RC meeting, Judy was unaware of the release.
- Monthly Teleconferences with Pfizer & Searle Regional Managers: At the CCC meeting of February 29, it was agreed that monthly teleconferences would be conducted to ensure better communication and alignment among the Pfizer & Searle marketing & sales organizations. [It was a Pfizer proposal from Randi and me. Judy Robertson was present when the plan was devised.] The first call was to occur eight days later on March 8. Pfizer marketing organized the calls and drafted the presentation deck. All we

needed was Searle marketing "approval" and participation in the teleconferences. Voice mails and e-mails were left for Susan to appoint the marketing squad to support the effort. Susan responded that she could not remember what the calls were for, but it sounded like operations, so that would be Judy Robertson. Judy could not be located until Monday (she was in B school on Friday). However, on Monday, she was in yet another all-day meeting that focused on fixing the messaging (Gary Jortner was actually in attendance at that meeting with Judy.) When we did find her, she was unclear about the purpose of the calls. When I refreshed her memory, she insisted on reworking the messaging part of the deck. Pfizer marketing had focused the message on efficacy. Judy demanded that it be broadened to cover the BEST framework. Judy injected three of her marketing staff into the process; they were unable to contribute much since they had never been informed about nor prepared to work on the teleconferences. Time was ticking since the deck needed to be finished and mailed to the managers. Needless to say, the deadline passed; the deck was compromised; the mailing went out a day late which provided little or no time for RMs to receive and review before the call. Moreover, given the mess of the messaging section, we let Judy review it on two of the three calls. Carl Wilbanks expressed significant dissatisfaction with Judy's presentation. The messaging section was the most criticized by the RMs.

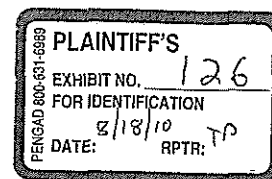
3. Unilateral communication and decision making: Pfizer is the "junior" partner in the COX-2 endeavor. Al Heller, Joe Papa, and Nancy Rasmussen make all the decisions: Selected examples
 - Pharmacia Field Force: Hank McCrorie was recently notified that on June 1 Pharmacia would add approximately 750 representatives to the Celebrex selling effort. No dialogue or joint decision making was considered. The CCC never discussed, despite my direct request to Susan Kundel that the CCC be involved in any changes to Celebrex marketing or sales efforts post Pharmacia merger. This underscores how ineffective and unnecessary the CCC is.
 - CHOICE Trial: As you may recall, Searle intends to conduct a 5,000 investigator, 50,000 patient study. Several weeks have been spent by Pfizer and Searle Medical, Marketing, Legal and Regulatory trying to design a trial protocol that reflects credible clinical study. While Searle and Pfizer agree that a field-based clinical trial would be valuable, the Searle proposal lacked substance. Nevertheless, the Searle proposed study would cost in excess of \$20MM. Despite Pfizer concerns, Searle intends to proceed with or without Pfizer. Furthermore, Pfizer proposals for clinical studies (QD in RA, QD in OA, etc) are summarily dismissed without consideration.

That concludes this edition of the whine list. On the positive side, the Pharmacia merger has been completed. Fred Hassan is reportedly very involved in COX-2 decisions (although the unilateral decision to add Pharmacia reps may not be a good sign...). And Judy Robertson will depart Searle this Friday to begin her employment at BMS. Maybe she is the first of many departures post merger.

EXHIBIT 79

**Executive Summary
(6/21/98)**

**Celebra Life Cycle Plan
1998-1999 Budget**



Regulatory filings for the global registration of Celebra will take place this summer during July and August. Celebra is the prototype of a new class of anti-inflammatory drugs indicated for use in treating the signs and symptoms of osteoarthritis (OA), rheumatoid arthritis (RA), and the management of pain. The submission contains data from 51 clinical trials involving more than 13,000 subjects or patients, 4,700 endoscopies and 3,000 patient years of Celebra exposure. Overall results from the development program indicate that Celebra has substantial and comparable efficacy to the NSAID class of anti-inflammatory drugs, but with a markedly superior safety profile.

The need for an effective anti-inflammatory and analgesic drug which is generally safe and devoid of gastrointestinal, renal, and platelet adverse toxicities is undisputed. NSAIDs are among the most widely used drugs in the world because they are established efficacious agents for treating a broad range of inflammatory and painful conditions. Use of these agents is projected to increase sharply as the population in developed countries ages and the prevalence of chronic forms of arthritis increases. Moreover, with widely available access to modern health care in developing countries, use of medications to treat arthritis and manage pain is projected to increase dramatically.

The major forms of adverse events associated with the use of NSAIDs are gastrointestinal ulceration and its complications, including bleeding, perforation, and gastric outlet obstruction, increased bleeding due to platelet dysfunction, and nephrotoxicity. In the United States alone, an estimated 76,000 patients develop significant GI complications caused by NSAIDs each year, resulting in nearly 8,000 deaths annually. Bleeding risk due to platelet dysfunction is a major medical problem, not just because of the actual morbidity or mortality of the bleeding episodes themselves, but also because many patients who have independent conditions which increase their risk of bleeding (e.g. anticoagulants, perioperative status) are denied the beneficial use of NSAIDs because the additive bleeding risk imposed by use of these agents becomes unacceptably high. The nephrotoxic effects of NSAIDs result in hypertension, fluid retention, and uncommonly, renal failure. While these renal adverse effects may be uncommon with carefully managed medical care, their inherent mechanism-based nature combined with the widespread use of NSAIDs in patients with reduced or borderline renal function, such as the elderly and patients with congestive heart failure, make the NSAID nephrotoxicity a significant concern in patients who require antiinflammatory or analgesic therapy.

NSAIDs pose a risk for these types of side effects because their mode of action results in unavoidable, mechanism-based adverse effects on the GI mucosa, platelets, and kidneys, due to their non-selective inhibition of cyclooxygenase (COX) enzymes. COX is a ubiquitous cellular enzyme which mediates conversion of arachidonic acid into

prostaglandins that serve as key mediators of inflammatory processes. However, prostaglandins are also needed to maintain normal gastrointestinal and platelet function, as well as renal function under physiologically stressed conditions. Recently, two distinct forms of COX were identified and designated COX-1 and COX-2. COX-1 is constitutively expressed in most tissues throughout the body, including the GI tract, kidney and platelets. COX-2, a cytokine-inducible form of the enzyme, is normally found in very low amounts in healthy tissue, except in the brain and kidney, but is prominently expressed in inflamed tissues. The efficacy and clinical safety profile of NSAIDs is based on their non-specific inhibition of the two isoforms of COX. Therapeutic benefits of NSAIDs are largely due to the inhibition of COX-2 at inflammatory sites, while the GI, and platelet toxicity results from inhibition of COX-1; the role of each isoform in the kidney is still uncertain. These and other laboratory observations and hypotheses have led to the synthesis and clinical development of Celebra, a specific COX-2 inhibitor (SCI).

The predicted product profile of Celebra, an antiinflammatory agent which combines the efficacy of NSAIDs with superior GI, platelet, and renal safety, has been extensively documented in the clinical registration program. The post submission plan for Celebra is a program with both technical and commercial goals. This initiative is designed to support and corroborate the basic science package underlying the concept that SCIs represent an entirely new class of drugs for treating the signs and symptoms of OA, RA, and for managing pain. In addition, these trials seek to further document and expand the growing body of evidence distinguishing SCIs from the NSAID class of antiinflammatory drugs. The Celebra campaign is also intended to establish safety, efficacy, and regulatory hurdles that will elevate entry barriers for the wave of COX-2 inhibitors beginning to emerge from discovery programs throughout the industry.

The Life Cycle post-submission plan for Celebra, which is summarized in the matrix chart on the next page, involves studies directed at four key objectives:

1. support and expansion of the OA, RA, and pain claims structure;
2. enhanced safety profile;
3. Phase IV marketing studies; and
4. new indications and line extensions.

The scope and depth of the plan was developed, reviewed, and prioritized through the joint efforts of the Development Committee (DC), Regulatory Committee (RC) and the Global Commercialization Committee (GCC) with input from the Country Commercialization Committee (CCC). Studies targeted at each of the four objectives were ranked according to their priority. They fall into four groups: ongoing, high likelihood, low likelihood, and those that would be triggered only if requested by a regulatory agency, newly identified commercial need, or the successful outcome of an ongoing pilot study.

Celebra Life Cycle Plan

	OA/RA/Pain	Enhance Safety Profile	Phase IV Marketing Studies	New Indications and Line Extensions
Ongoing Studies	<ul style="list-style-type: none"> 2 open label extensions 3 European pain trials 4 post op pain trials Post-surgical joint PG levels (sponsored research) 			<ul style="list-style-type: none"> Alzheimer's disease Colon Cancer prevention: (FAP, HNPCC) Controlled release dosage form
High likelihood or committed • Start 98-mid-99	<ul style="list-style-type: none"> Synovial Fluid levels PG's in gastric juice 	<ul style="list-style-type: none"> CLASS studies Aspirin PD interaction Aspirin sensitive asthma Non-Resp. <ul style="list-style-type: none"> ACE Inhibitors CCB 5 drug interaction studies Bone marker pilot study (sponsored research) 	<ul style="list-style-type: none"> Comparator trials <ul style="list-style-type: none"> Nabumetone Meloxicam Nimesulide Diclofenac Global OA experience trial Global back pain trial US registry trial Strains and sprains Managed care trials Investigator research 	<ul style="list-style-type: none"> Juvenile RA Other Cancer prevention: <ul style="list-style-type: none"> SAP Bladder Acidic keratoses Barrett's esophagus Easy to swallow dosage form
Lower likelihood • Start late 99+	<ul style="list-style-type: none"> Steroid sparing DMARD pilot study DMDAD pilot study 	<ul style="list-style-type: none"> 5 additional drug interactions PK/PD <ul style="list-style-type: none"> beta blockers diuretic Renal effects in diabetes 		<ul style="list-style-type: none"> Topical dosage form Ankylosing spondylitis (U.S.)
Contingent on regulatory request commercial need or results from pilot trial	<ul style="list-style-type: none"> Reg Study for China Chronic pain AM OA dosing QD dosing in RA 	<ul style="list-style-type: none"> Bone mineral density trial 	<ul style="list-style-type: none"> 2nd nabumetone comparator 	<ul style="list-style-type: none"> Additional cancer prevention trials Additional Alzheimer's trials

CLASS TRIALS

Far and away, the single largest item in the budget is the CLASS trials. These are large, GI event-based studies with the potential for major regulatory and commercial benefits.

Regulatory

Such a study would:

- provide the basis for requesting a modification of the GI warning in the U.S. label in the event that that NSAID class warning is imposed on SCI labeling by FDA
- set a precedent for qualification of other compounds into the SCI Class
- be endorsed by the FDA Advisory Committee

Commercial

Such a study would:

- provide a publication in a high quality journal
- provide pharmacoeconomic data required in markets like Canada and Australia
- health care resource utilization which is of importance to managed care organizations

An outcome study is in keeping with best practices of competitors like Merck

It is estimated that such a study could contribute ~\$300 million change in peak sales based on:

- deletion of class warning
- participants in outcome studies have higher prescribing practices

MARKET SUPPORT

Overview

Another major area of focus is the market support program. The focus of this series of studies is to maximize the commercial success of celecoxib through the development of a global Phase IV clinical development program. This objective required the determination of an optimal mix of Phase IV programs that would assure the rapid uptake of celecoxib by health care providers and consumers around the world.

Phase I-III trials will support celecoxib indications in OA, RA and pain. Although extensive work in these areas has been done, several lines of information support further clinical trial development in some of these areas plus additional new areas.

An internal Searle analysis with input from the CCTF, world affiliates, GMO, and R&D suggested the following strategic objectives for Phase IV:

1. Development of global trials consistent with the global commercial platform for celecoxib.
2. Focus should be on the following objectives:
 - Expand the user base
 - Expand clinical indications
 - Strengthen market differentiation

Following the internal analysis, an external analysis was conducted to help validate the internal findings. The external analysis focused on a gap analysis, industry best practices (in the area of arthritis and others), benchmarking with respect to spend and market research with key opinion leaders in several key markets. The analysis supported to a great extent the internal Searle findings.

1. Gap Analysis: Key Findings

- Conduct studies in real-world situations
- Strengthen clinical data on primary indications and new uses
- Develop experience with target physicians
- Expand the base of investigators
- Address the specific sub-populations
- Establish superiority over competitors

2. Best Practices: Key Findings

- Phase IV clinical research has evolved to be a crucial strategy for enhancing the product profile and driving market share growth.
- Large-scale Phase IV programs have become a key strategy.
- Phase IV programs are implemented closer to launch in order to maximize sales potential over the entire product profile.

3. Market Research: Key Findings

- Large-scale and long-term trials are needed to generate "real world" experiences and confirm the safety and efficacy in special populations.
- Some areas of concern that need to be addressed: use in special populations.
- Key comparators

U.S.	Europe	
Ibuprofen	Diclofenac	Piroxicam
Naproxen	Ibuprofen	Meloxicam
Nabumetone	Naproxen	Nimesulide
Etodolac		

The above analyses lead to the following recommendations with regard to the Phase IV trials:

- Global OA trial
- Global back pain trial
- Global strains, sprains, sports injury
- Trials against specific comparators
- Registry trial

Specific Trials and Marketing Rationale

A. Global OA Trial

Objective: Obtain a large base of physicians with experience with Celebra in a primary indication (OA)

Target: Approximately 12,000 patients in 1,200 sites worldwide

Rationale: Expand base of users
Conduct real-world studies
Strengthen clinical data
Meet physician needs for large scale and long-term trials
Consistent with industry best practices

B. Global Low Back Pain Trial

Objective: Obtain a large base of physicians with experience with Celebra in a common area of use for anti-inflammatory/analgesic drugs

Target: Approximately 3,000 patients in 500 sites worldwide

Rationale: Expand base of users
Conduct real-world studies
Support other clinical applications
Consistent with industry best practices

C. Global Strains, Sprains, Sports Injury Trial

Objective: Obtain a large base of physicians with experience with Celebra in common conditions in which anti-inflammatory/analgesic drugs are needed

Target: Approximately 3,000 patients in 500 sites worldwide

Rationale: Expand based of users: younger group
Conduct real-world studies
Support other clinical applications: acute setting
Consistent with industry best practices

D. Comparator Trials: Celebra vs. Relafen (U.S.)

Objective: Obtain data in a head-to-head comparison with Relafen

Target: Approximately 1,000 patients

Rationale: Enhance product profile against a major competitor
Consistent with industry best practices
Strengthen physician differentiation of Celebra vs NSAIDs

E. Comparator Trials: Celebra vs Nimesulide and Meloxicam (Europe/Asia/Latin America)

Objective: Obtain data in a head-to-head comparison with two leading COX-2 impostors

Target: Approximately 500 patients per study

Rationale: Enhance product profile against a major competitor
Consistent with industry best practices
Strengthen physician differentiation of Celebra vs impostors

F. Registry Trial: U.S. and Canada

Objective: Celebra rapid experience with a large base of physicians to
assess how Celebra will be used

Target: Approximately 11,000 patients with 2,500 sites

Rationale: Rapid expansion of user base, especially with PCPs
Real world experience
Consistent with industry best practices

Timing of Trials

Traditionally, Phase IV programs often began once a product was approved and launched. An analysis of industry trends clearly points to the initiation of Phase IV closer to and even before regulatory approval. The goal of such a trend is to maximize the clinical impact at launch to accelerate uptake of the product by key segments. Therefore, timing of start of trials should closely parallel the anticipated launch sequence of celecoxib in the key markets. An attempt will be made to phase in the start of the global trials to match launch sequences, but this may be compromised to assure maximum efficiency in conducting the global trials.

OTHER STUDIES IN OA/RA/PAIN

A number of smaller studies aimed at bolstering safety data in special populations were also considered to be high priority. These include the renal safety trials in patients with congestive heart failure, and hypertensive patients on ACE inhibitors and calcium channel blockers. Celebra's safety in aspirin sensitive asthmatics was ranked as a highly desirable study as well. Additional scientific investigations in prostaglandins in gastric juice and synovial fluid levels will provide answers to questions currently asked by investigators and advocates.

LINE EXTENSIONS

In the arthritis market, companies have developed alternative formulations of their oral NSAID products to extend product life-cycles, defend market share, obtain a new indication, or simply to meet customer needs or preferences. In major markets, Novartis generates an additional \$260 million in sales of Voltaren line-extensions. Pfizer generated an additional \$120 million from Feldene line-extensions at peak sales. Our goal with the line extension program for celecoxib is to grow market share by providing products for new indications and to meet customer needs.

As celecoxib is expected to be launched as 100 mg and 200 mg capsules taken BID and Searle's main competition, Merck's Vioxx, is expected to be dosed once-a-day, the first and immediate priority is the development of a 200 mg once-a-day controlled release oral tablet for osteoarthritis and rheumatoid arthritis use. This line extension will provide once a day dosing convenience as well as meeting customer preference for tablet versus capsule dosage forms.

A second desirable dosage form would be an easy to swallow tablet. This dosage form will be characterized by rapidly disintegrating/dissolving in the mouth within a few seconds. This will provide convenient dosing for patients with swallowing difficulties or patients who are on reduced fluid intake. This dosage form may also be rapidly dispersed in water such that a patient could administer the dose in liquid form for potentially both a pediatric and adult use.

Topical NSAIDs are widely used outside the U.S. These products, delivered topically, are truly transdermal formulations, usually gels, lotions, ointments, or creams. While the market is sizable (~\$600 million), there are several reasons to believe this market is not an immediate priority when compared to the above dosage forms. Although there is no critical need for Searle to develop a transdermal COX-2 inhibitor, some patients may prefer a transdermal product and it is likely a key component of an eventual OTC product portfolio.

OTHER INDICATIONS

There is a growing body of scientific evidence supporting the premise that inflammatory mechanisms play a key role in the pathogenesis of several major diseases beyond OA and RA. The superior safety profile of Celebra, coupled with a rapidly expanding knowledge-base in COX-2 technology, suggests that SCIs may offer broader therapeutic and commercial potential than NSAIDs. The combined mechanistic and safety credentials of Celebra create an unique opportunity for chronically treating Alzheimer's disease and cancers in an aging global population that must be explored.

Cancer

Several lines of evidence, ranging from laboratory studies through clinical observations suggest that COX-2 inhibitors may be effective in treating colon polyps and preventing colon cancer. There is extensive clinical and epidemiological data linking NSAID use to a decreased incidence of colorectal adenomas and cancer. Observation of elevated COX-2 levels in colorectal adenomas and evidence showing that COX-2 inhibition is effective in decreasing colon cancer development in rodent models suggests that Celebra may be useful in colon cancer chemoprevention. An important step in moving this program forward has been agreement by FDA (2/98) that adenomatous polyps are surrogate markers for colorectal cancer and a legitimate target for intervention. The overall clinical plan is to evaluate Celebra for adenoma prevention first in patients at high genetic risk, a small, if not orphan population, and subsequently in patients with sporadic colorectal adenomatous polyps (SAP), which is a significant market. A Phase II/III polyp reduction trial in patients with familial adenomatous polyps (FAP) began in April and is fully enrolled. Favorable completion of this pivotal study (11/98) could support an sNDA for adenoma reduction in FAP patients early next year. A Phase I/II polyp prevention and biomarker modulation study in patients with hereditary non-polyposis colon cancer (HNPCC) is underway and the pivotal Phase III adenoma prevention trial in SAP patients is projected to start in the fall. Favorable results from these initial probes will trigger studies in other cancers.

Alzheimer

In addition to cancers, there is also literature linking inflammatory mechanisms with the pathogenesis of the neurodestructive process of Alzheimer's Disease. Epidemiological studies and clinical trials have revealed an inverse correlation between NSAID intake and dementia. A published double-blind, randomized, placebo-controlled, six month clinical trial of indomethacin vs. placebo found a 1.45% improvement on cognitive tests in the indomethacin treated group and an 8.4% decline in the placebo group. However, 20% withdrawal was noted in the indomethacin arm because of GI adverse events. Celebra has the mechanistic potential to provide efficacy in delaying or altering the effects of Alzheimer's Disease and the safety profile for chronic administration to the elderly. A Phase II proof-of-concept trial to assess Celebra utility in delaying onset or retarding disease progression is fully enrolled and will readout in 2Q99.

The post submission Life Cycle plan is substantial. Full execution of all the studies outlined in the matrix chart could entail as many as 45 distinct trials, more than 40,000 patients and a maximum cost of nearly \$400 MM. However, governance committee members have spent considerable time assessing the technical and commercial merit of individual studies, optimizing designs, prioritizing rollouts, and probability adjusting the program price tag. Overall costs of the program and the dollar rollout over the next few years is tabulated in the chart on the next page.

Ongoing trials represent dollars that are largely committed and offer little room for adjustments. This amounts to approximately \$51.0 million over the next 2 years. Contingent and low likelihood study costs constitute approximately \$55.0 million. There is a good likelihood that most of these studies will not be initiated. Both categories in total are about 25% of the proposed budget and were probability adjusted for only a

30% chance of being triggered as shown in the quarterly spending by probability chart. The Class Trials and Market Support program account for approximately 50% of the proposed budget for Celebra costing approximately \$100.0 million each. Another major variable which could change the landscape considerably resides with the analgesic indication. Planned Phase IV pain trials and the need to demonstrate Celebra efficacy in various pain area will contribute ~\$26.0 MM to the bill. Market research regarding the relative positioning of celecoxib and valdecoxib in the pain market as well as regulatory acceptance of the pain indication for Celebra will determine the benefit of these expenditures. For budgeting purposes, it is recommended that the analgesic slots be retained and allocated accordingly when market research is complete in the fall. A separate budget summary for valdecoxib will issue shortly.

Celecoxib Research Budget Summary

	\$* Million			
	1998	1999	2000+	TOTAL
Celecoxib				
OA/RA/Pain				
- Regulatory/Development Studies				
- Ongoing Studies	25.0	13.5		38.5
- Class	25.9	74.1		100.0
- Other High Likelihood	3.6	6.4		10.0
- Low Likelihood		7.8	18.4	26.2
- Market Support	16.2	89.5	9.1	114.8
- Contingent Studies (if required)		15.5	2.0	17.5
- Other Activities	5.9	5.9	5.8	17.6
New Indications				
- Chemoprevention	5.6	11.4	22.4	39.4
- Alzheimer	5.1	7.2	10.7	23.0
- JRA	-	0.6	1.7	2.3
Line Extensions	2.2	8.7	3.0	10.9
TOTAL	89.5	240.6	70.1	400.2
* External costs only				

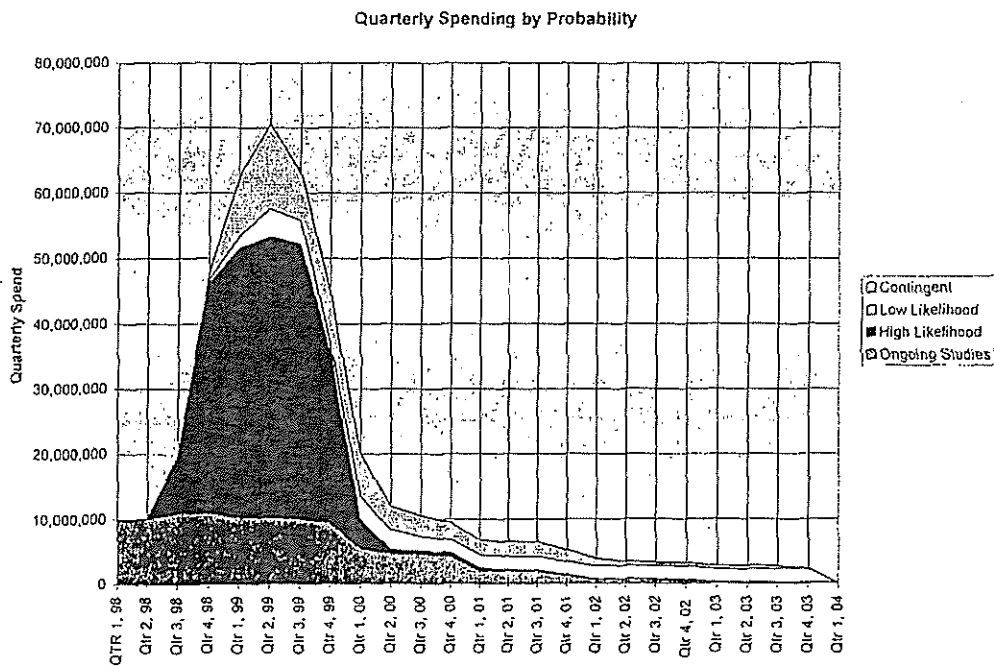
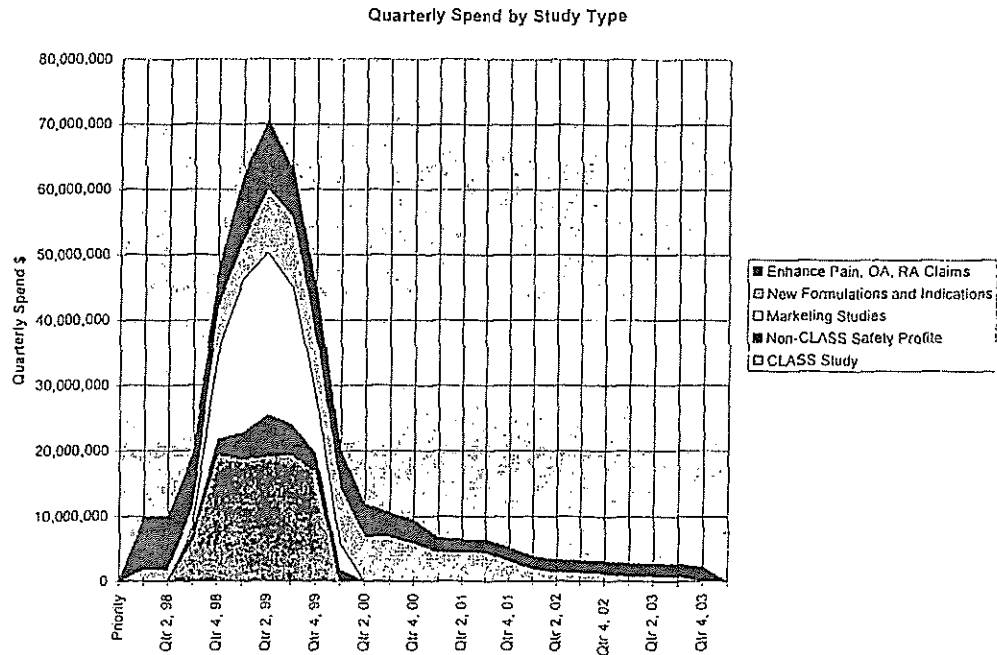
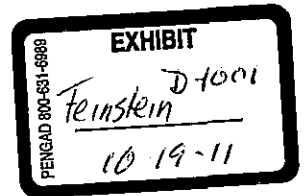


EXHIBIT 80

1 of 2

BN Pharmacia Hasn't Shown Celebrex Safety Benefit, FDA Review Says
Feb 6 2001 10:05:02



Pharmacia Hasn't Shown Celebrex Safety Benefit, FDA Review Says

Washington, Feb. 6 (Bloomberg) -- Pharmacia Corp.'s Celebrex painkiller isn't significantly less likely to cause stomach problems than older, cheaper painkillers, a U.S. government review of a company study concluded.

The U.S. Food and Drug Administration review of a trial, designed to show that Celebrex was less likely to cause stomach bleeding, could mean problems for Pharmacia tomorrow when it asks an FDA advisory panel to support changes to the drug's label.

The reviewers said the study didn't show significantly fewer stomach problems in patients taking Celebrex, known chemically as celecoxib, than in those taking ibuprofen or diclofenac, two older medicines known as non-steroidal anti-inflammatory drugs, or NSAIDs. Only by looking at selected parts of the data -- a practice discouraged by the agency -- was the company able to show a benefit, the reviewers said.

"Celecoxib did not demonstrate statistical superiority to NSAIDs or either comparator with regards to the primary safety endpoint . . . at any point in the trial although there were trends that favored celecoxib," wrote James Witter, the FDA medical officer that reviewed the data.

The review was prepared for tomorrow's meeting, where the panel will hear both the FDA's and Pharmacia's analysts of the study data. If the panel and agency support changing the drug's label, the company will be freer to claim the drug is safer than older drugs.

On Thursday, the panel will weigh whether data show that Merck & Co.'s Vioxx, Celebrex's biggest competitor, is safer than older drugs. Both Vioxx and Celebrex are members of a class of drugs known as Cox-2 inhibitors, which were designed to be easier on the stomach than older drugs.

--Brian Reid in Chicago, though the Washington newsroom (202) 624-1820 or brireid@bloomberg.net/jcn

The FDA has posted the briefing documents for the meeting on its Web site:

<http://www.fda.gov/ohrms/dockets/ac/01/briefing/3677b1.htm>

Story illustration: to graph the performance of Pharmacia shares against the Dow Jones Industrial Average over the past year, type {PHA US <Equity> COMP D INDU <GO>}

For the day's top health news, type {HTOP <GO>}

NI Codes:

MRK US <Equity> CN

PHA US <Equity> CN

PFE US <Equity> CN

NI HEA

NI COS

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BN Pharmacia Hasn't Shown Celebrex Safety Benefit, FDA Review Says
Feb 6 2001 10:05:02

NI FDA
NI RULES
NI DRG
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EXHIBIT 81

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

_____)
ALASKA ELECTRICAL PENSION) NO. 03-1519 (AET)
FUND, CITY OF SARASOTA) (Consolidated)
FIREFIGHTERS' PENSION FUND,)
INTERNATIONAL UNION OF) CLASS ACTION
OPERATING ENGINEERS LOCAL)
132 PENSION PLAN, NEW)
ENGLAND HEALTH CARE)
EMPLOYEES PENSION FUND,)
CHEMICAL VALLEY PENSION FUND)
OF WEST VIRGINIA, and PACE)
INDUSTRY UNION-MANAGEMENT)
PENSION FUND, On Behalf of)
Themselves and All Others)
similarly Situated,)
Plaintiffs,)
vs.)
PHARMACIA CORPORATION, FRED)
HASSAN, G. STEVEN GEIS,)
CARRIE COX, and PFIZER,)
INC.,)
Defendant.)
_____)

DEPOSITION of STEVEN P. FEINSTEIN,
Ph.D., called as a witness by and on behalf of the
Defendants, pursuant to the applicable provisions
of the Federal Rules of Civil Procedure, before P.
Jodi Ohnemus, RPR, RMR, CRR, CA-CSR #13192, NH-CSR
#91, MA-CSR #12393, and Notary Public, within and
for the Commonwealth of Massachusetts, at the
offices of DLA Piper, LLP, 33 Arch Street, Boston,
Massachusetts, on Wednesday, 19 October, 2011,
commencing at 9:05 a.m.

Page 2	Page 4
<p>1 APPEARANCES:</p> <p>2</p> <p>3 ROBBINS GELLER RUDMAN & DOWD, LLP</p> <p>4 BY: Scott H. Saham, Esq.</p> <p>5 -and-</p> <p>6 Lucas F. Olts, Esq.</p> <p>7 655 West Broadway</p> <p>8 Suite 1900</p> <p>9 San Diego, CA 92101</p> <p>10 619 231-1058</p> <p>11 Ssaham@rgrdlaw.com</p> <p>12 Lolts@rgrdlaw.com</p> <p>13 For the Plaintiffs</p> <p>14</p> <p>15</p> <p>16 SCOTT & SCOTT LLP</p> <p>17 BY: Matthew Montgomery, Esq.</p> <p>18 707 Broadway</p> <p>19 Suite 1000</p> <p>20 San Diego, CA 92101</p> <p>21 For the Plaintiffs</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 APPEARANCES: (CONT'D)</p> <p>2 ALSO PRESENT:</p> <p>3 Daniels S. Bettencourt,</p> <p>4 Crowninshield Financial</p> <p>5 Research, LLC</p> <p>6</p> <p>7 Rvai Sinha</p> <p>8 Cornerstone Research</p> <p>9</p> <p>10 Shannon McGovern</p> <p>11 Anthony Piccirilli, Videographer</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>
Page 3	Page 5
<p>1 APPEARANCES: (CONT'D)</p> <p>2</p> <p>3 MOTLEY RICE LLP</p> <p>4 BY: Lance V. Oliver, Esq.</p> <p>5 28 Bridgeside Boulevard</p> <p>6 Mt. Pleasant, SC 29464</p> <p>7 843-216-9061</p> <p>8 Loliver@motleyrice.com</p> <p>9 For the Plaintiffs</p> <p>10</p> <p>11 SIMPSON THACHER & BARTLETT LLP</p> <p>12 BY: George S. Wang, Esq.</p> <p>13 425 Lexington Avenue</p> <p>14 New York, NY 10017-3954</p> <p>15 212 455-2228</p> <p>16 Gwang@stblaw.com</p> <p>17 For the Defendants</p> <p>18</p> <p>19 DLA PIPER LLC</p> <p>20 BY: Michael S. Wigotsky, Esq.</p> <p>21 1251 Avenue of the Americas</p> <p>22 New York, NY 10020-1104</p> <p>23 212 335-4789</p> <p>24 Michael.wigotsky@dlapiper.com</p> <p>25 for the Defendants</p>	<p>1 I N D E X</p> <p>2</p> <p>3 TESTIMONY OF: PAGE</p> <p>4</p> <p>5 STEVEN P. FEINSTEIN, Ph.D.</p> <p>6</p> <p>7 (By Mr. Wang) 8</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

2 (Pages 2 to 5)

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<p>1 EXHIBITS</p> <p>2</p> <p>3 EXHIBIT DESCRIPTION PAGE</p> <p>4 Exhibit 67 previously marked 47</p> <p>5</p> <p>6 Feinstein 1000 Patell and Wolfson paper 110</p> <p>7</p> <p>8 Feinstein 1001 Bloomberg report, 2/6/2001 123</p> <p>9</p> <p>10 Feinstein 1002 Bear Stearns Report, 182</p> <p>11 2/7/2001</p> <p>12 Feinstein 1003 Merrill Lynch report, 185</p> <p>13 2/8/2001</p> <p>14 Feinstein 1004 letter, 2/2/2001 192</p> <p>15</p> <p>16 Feinstein 1005 Declaration of Scott Hakala 192</p> <p>17</p> <p>18 Feinstein 1006 document, 6/7/2002 276</p> <p>19</p> <p>20 Feinstein 1007 multipage document 329</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 MR. BETTENCOURT: Dan Bettencourt,</p> <p>2 Crowninshield Financial Research, for the</p> <p>3 Plaintiffs.</p> <p>4 MR. WANG: George Wang, for the</p> <p>5 Defendants.</p> <p>6 MS. McGOVERN: Shannon McGovern, for the</p> <p>7 Defendants.</p> <p>8 MR. SINHA: Ravi Sinha, for the defense.</p> <p>9 MR. WIGOTSKY: Michael Wigotsky, DLA</p> <p>10 PIPER, for the Defendants.</p> <p>11 STEVEN P. FEINSTEIN, Ph.D., having</p> <p>12 satisfactorily been identified by</p> <p>13 the production of a driver's license,</p> <p>14 and being first duly sworn by the Notary</p> <p>15 Public, was examined and testified as</p> <p>16 follows to interrogatories</p> <p>17 BY MR. WANG:</p> <p>18 Q. Good morning, Doctor Feinstein.</p> <p>19 A. Good morning.</p> <p>20 Q. Could you state your name and address for</p> <p>21 the record, please.</p> <p>22 A. Steven Feinstein, 217 Freeman Street,</p> <p>23 Brookline, Massachusetts 02446.</p> <p>24 Q. You've testified at a deposition before?</p> <p>25 A. Yes.</p>
Page 7	Page 9
<p>1 VIDEO OPERATOR: Good morning. My name is</p> <p>2 Anthony Piccirilli, of Veritext, New York. The</p> <p>3 date today is October 19th, 2011, and the time is</p> <p>4 9:05 a.m.</p> <p>5 This deposition is being held in the</p> <p>6 office of DLA Piper, located at 33 Arch Street,</p> <p>7 Boston, Mass., 02110.</p> <p>8 The caption of this case is Alaska</p> <p>9 Electrical Pension Fund, et al. versus Pharmacia</p> <p>10 Corporation, et al. in the US District Court for</p> <p>11 the District of New Jersey.</p> <p>12 The name of the witness is Steven</p> <p>13 Feinstein. At this time the attorneys will</p> <p>14 identify themselves and the parties they represent,</p> <p>15 after which our court reporter, Jodi Ohnemus, of</p> <p>16 Veritext, New York, will swear in the witness and</p> <p>17 we can proceed.</p> <p>18 MR. SAHAM: Scott Saham, for the</p> <p>19 Plaintiffs.</p> <p>20 MR. MONTGOMERY: Matt Montgomery with</p> <p>21 Scott & Scott for the Plaintiffs.</p> <p>22 MR. OLIVER: Lance Oliver with MotleyRice,</p> <p>23 for the Plaintiffs.</p> <p>24 MR. OLTS: Lucas Olts, Robbins Geller for</p> <p>25 the Plaintiffs.</p>	<p>1 Q. On multiple occasions?</p> <p>2 A. Yes.</p> <p>3 Q. Are you generally familiar with the</p> <p>4 process of a deposition?</p> <p>5 A. Yes.</p> <p>6 Q. Can you tell me what you did to prepare</p> <p>7 for this deposition?</p> <p>8 A. You mean -- just to clarify, preparing</p> <p>9 specifically for this deposition, not preparing my</p> <p>10 opinions for this case?</p> <p>11 Q. That's correct.</p> <p>12 A. I reviewed all my documents. I reviewed</p> <p>13 my reports. I reviewed the reports submitted by</p> <p>14 Doctor Lane and Doctor Fiorino, which is included</p> <p>15 in all my documents; and I met on two occasions</p> <p>16 with Plaintiffs' attorneys.</p> <p>17 Q. When did you meet?</p> <p>18 A. On Monday and Tuesday of this week.</p> <p>19 Q. And for how long, approximately?</p> <p>20 A. Five hours each time, approximately.</p> <p>21 Q. With -- can you tell me with whom you met.</p> <p>22 A. Yes, I can. And you want me to do that,</p> <p>23 right?</p> <p>24 Q. Yeah. Please.</p> <p>25 A. Okay. So if -- let's see.</p>

3 (Pages 6 to 9)

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<p style="text-align: right;">Page 10</p> <p>1 On the first day, it was Scott Saham. 2 And who else was there? Dan 3 Bettencourt -- my assistant at Crowninshield -- was 4 there. Matt was there; and on the second day, it 5 was the same people, plus Patrick Coughlin. 6 Q. In preparing your report, who assisted 7 you? 8 A. Well, I just want to first clarify that 9 the report was prepared entirely under my 10 direction, with the assistance of my staff at 11 Crowninshield Financial Research, which included 12 Daniel Bettencourt; and I believe at the time, in 13 the early stages, Steven Achatz, spelled 14 A-c-h-a-t-z. 15 Could have been additional personnel, but 16 those are the folks that worked with me most 17 closely. 18 Q. What are the expert opinions that you 19 intend to offer in this case? 20 A. If I can refer to my report. 21 Q. Sure. 22 A. And I'm not sure this is -- I mean, 23 frankly, I'll -- I'll answer any question I'm 24 asked. So this might not be the entirety of the 25 opinions, but the opinions break down into three</p>	<p style="text-align: right;">Page 12</p> <p>1 Q. The second subject you mentioned was loss 2 causation. 3 What was your conclusion in that regard? 4 A. On account of the alleged -- or alleged 5 misrepresentations and omissions, the price of 6 Pharmacia stock was inflated over the course of the 7 class period; and when disclosures were made that 8 revealed the truth to the market, the stock price 9 fell, and the inflation dissipated, causing 10 investors to suffer losses; and specifically, on a 11 per-share basis, I calculated \$5.92 per share was 12 the inflation that was embedded in the stock price; 13 and losses, therefore -- on a per-share basis for 14 various investors, amount up to that much per 15 share. 16 Q. At the beginning of your answer you 17 referred to "alleged misrepresentations and 18 omissions." 19 A. That's right. 20 Q. Are you referring to the 21 misrepresentations and omissions alleged by the 22 Plaintiffs in this case? 23 A. Yes. 24 Q. Did you, yourself, form any conclusions or 25 opinions as to whether there were</p>
<p style="text-align: right;">Page 11</p> <p>1 categories, which correspond to the three types of 2 research I did for this case: Research about -- 3 and research and opinions about market efficiency 4 of Pharmacia stock, research and opinions related 5 to loss causation, and opinions on damages. 6 And do you want the specifics of those 7 opinions? 8 Q. Why don't we take those briefly in turn. 9 A. Well, actually, I want to continue. 10 Q. Keep going. 11 A. I also, in the course of this engagement, 12 was asked to evaluate the reports submitted by 13 experts retained by Defendants, Doctor Lane and 14 Doctor Fiorino; and I formed opinions about their 15 -- I formed opinions about their conclusions and 16 the quality of their work that I'd be willing to 17 offer as well. And I'm ready to offer those as 18 well. 19 Q. Okay. Let's begin with the first of the, 20 I think, four categories that you've identified, 21 which is opinions on market efficiency. 22 Can you tell me what you concluded on that 23 topic. 24 A. Over the course of the class period, 25 Pharmacia stock traded in an efficient market.</p>	<p style="text-align: right;">Page 13</p> <p>1 misrepresentations or omissions made in this case? 2 A. Well, I evaluated the data that was 3 available to the marketplace and that was being 4 evaluated by analysts throughout the class period; 5 and I did discern that there was important 6 information that was essentially concealed from 7 investors over the course of the class period; and 8 I believe that my opinion about what was concealed 9 and what was misrepresented, that that information 10 was material information that impacts the value of 11 Pharmacia stock corresponds to the alleges made by 12 Plaintiffs. 13 Q. Are you offering an expert opinion in this 14 case that there was -- that there were 15 misrepresentations or omissions made? 16 A. Well, again, I -- I am offering an opinion 17 that there was material information -- and I've 18 identified material information -- that was not 19 available to investors and analysts, which caused 20 the stock price to be inflated. So if that 21 corresponds to what the allegations are, then my 22 opinion would be that I have drawn that opinion; 23 that that information was not there and not 24 available until the end of the class period. 25 Q. What is the material information that you</p>

4 (Pages 10 to 13)

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<p style="text-align: right;">Page 14</p> <p>1 allege was not made available to investors until 2 the end of the class period? 3 A. (Witness reviews document.) 4 MR. SAHAM: Objection to form. 5 A. But I also want to -- want to clarify that 6 it's -- some statements that -- you know, the 7 allegations -- I don't want to say that that was 8 the -- the entirety of the -- of the allegations, 9 or of my finding that there was important 10 information not available. There's also the 11 category of just statements that were clearly 12 misleading. 13 But Paragraph 45 of my report lays out the 14 answer to your question. And I -- you know, I was 15 careful how I worded it, so if you want the answer, 16 I think what I should do is just read Paragraph 45. 17 Q. Okay. Before we do that, can we start at 18 the beginning of the section? 19 A. Sure. 20 Q. I guess the main heading is, "Timeline of 21 Important Events" before Paragraph 40. 22 A. Yes. 23 Q. And then -- and then you -- you proceed to 24 outline a series of events, beginning with April 25 17th of 2000.</p>	<p style="text-align: right;">Page 16</p> <p>1 you know, I don't have a qualm with -- or believe 2 that it was false specifically to say that the -- 3 the study was in any way -- you know, was -- was 4 ground-breaking. 5 I mean, that just shows how material and 6 important the company believed the study was; and 7 -- and my analysis concurs that it was a very 8 important study for the success or failure of this 9 drug and success and failure of the company. 10 The statement, "It's a rigorous outcome 11 trial that set the bar higher than any previous 12 study of its kind," again, you know, taken in its 13 entirety in the context of the press release, I 14 believe the press release was misleading. I don't 15 have an opinion as to whether that particular 16 excerpt was -- was specifically false. 17 Q. Was the CLASS study a landmark study, in 18 your opinion? 19 A. Well, it was certainly a landmark study in 20 the history and of -- of Celebrex. I mean, 21 certainly, you know, if someone's going to write a 22 book about the history of Celebrex, you know, the 23 entire story, from beginning to end, this study 24 would be a major chapter. So yeah. 25 Q. And would also be a landmark study in the</p>
<p style="text-align: right;">Page 15</p> <p>1 And in discussing the April 17th, 2000 2 disclosure, you have -- you have Paragraph 41, a 3 statement that, "Pharmacia and Pfizer used glowing 4 terms to characterize CLASS as a 'landmark study' 5 and," quote/unquote, "ground-breaking"; and you 6 also say that the -- the statement says that, "It 7 was a rigorous outcome of the trial that set the 8 bar higher than any previous studies of its kind." 9 Do you see that? 10 A. I see that. 11 Q. Do you allege any of those statements 12 described in Paragraph 41 to be false or misleading 13 in any way? 14 MR. SAHAM: I'd object to the form. I 15 mean, you're using the word "allege," like, I mean, 16 he's not -- hasn't filed a complaint. 17 Q. Are you -- 18 MR. WANG: Okay. 19 Q. Are you opining that any of these 20 statements are false or misleading in any way? 21 A. Well, taken in their entirety, in the 22 context of the press release that was issued that 23 day, it's clear that, in their entirety, the press 24 release was misleading. 25 So I mean, we can -- you know, I -- I --</p>	<p style="text-align: right;">Page 17</p> <p>1 context of COX-2 inhibitors, more generally? 2 A. I mean, I -- you asked what the opinions 3 that I -- you know, I plan to express in this case. 4 That's not something I've -- up to this point -- 5 formed an opinion about specifically. 6 My opinion is that it was a -- an 7 important study. And it was anticipated to be an 8 important study. And it was viewed subsequently by 9 analysts to be an important study for purposes of 10 evaluating the company, Pharmacia, and their drug, 11 Celebrex. 12 Q. And do you agree that the CLASS study was 13 ground-breaking? 14 A. I don't know -- I don't know how to define 15 "ground-breaking" for that purpose. There was -- 16 it certainly opened -- you know, the conclusions, 17 as they were presented by Defendants, marks the -- 18 a clear point at which inflation entered into the 19 marketplace. So in that sense, it broke the ground 20 of inflation. 21 Q. Do you believe it's false to say that the 22 CLASS study was ground-breaking? 23 A. I don't have an opinion either way, 24 really. I mean, I hadn't formed an opinion either 25 way.</p>

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<p style="text-align: right;">Page 18</p> <p>1 Again, I mean, why -- what I said in this 2 paragraph -- and it says it very clearly in the 3 paragraph, and what I was emphasizing is that they 4 used glowing terms. The way the press release was 5 phrased highlighted how important the company and 6 Defendants believed this study to be. 7 So really, I mean, the reason why I 8 excerpted the word "ground-breaking" is to 9 emphasize that. And I think we can all agree that 10 the company thought that this study was an 11 extremely important study for -- you know, the 12 company and Defendants believed it was an important 13 study for the future prospects of Celebrex. 14 Q. Have -- has your expert testimony in any 15 other cases ever been excluded in all or part by a 16 court? 17 A. I don't believe that it has. 18 Q. Have you testified in the Apollo case? 19 A. Yes. 20 Q. Was your testimony allowed in full in that 21 case? 22 MR. SAHAM: Matt, I'd object to Defendants 23 calling for a legal conclusion. If you want to ask 24 him if he testified at trial in Apollo, I mean, 25 but...</p>	<p style="text-align: right;">Page 20</p> <p>1 Q. Were you allowed to testify about 2 materiality at that trial? 3 A. No. But it wasn't -- but there was -- so 4 again, that answers the question. There was no 5 testimony that I offered that was excluded. 6 Q. But you -- 7 A. I didn't testify -- I did not testify 8 about materiality at that trial. 9 Q. But you had opined upon materiality in the 10 expert reports you had submitted in that case? 11 A. I'm not sure. But the -- the decision 12 about not allowing me to testify about materiality 13 had nothing to do with my qualifications or the 14 quality of my research in that area. 15 It was a legal matter entirely about 16 whether or not materiality was an issue for the 17 trier of fact, rather than for expert testimony in 18 general. 19 Q. But you had attempted, at least in your 20 expert report in that case, to offer an expert 21 opinion upon materiality; isn't that correct? 22 A. Well, again, I don't recall exactly the 23 specifics. But as here, I mean, if I'm asked a 24 question about materiality, or -- or anything that 25 I'm an expert in, I'll -- I'll offer the opinion.</p>
<p style="text-align: right;">Page 19</p> <p>1 Q. Did you offer expert testimony in the 2 Apollo case? 3 A. Yes, I did. 4 Q. What were the subjects that you offered -- 5 that you attempted to offer expert testimony on in 6 that case? 7 A. My recollection -- and this is a case that 8 was a few years ago -- was that it was similar 9 issues or similar topics as in this case: Market 10 efficiency, loss causation, and damages. 11 Q. Are you aware that there were motions to 12 strike or exclude your testimony followed in that 13 case? 14 A. I do know for sure that there was no 15 successful Daubert; and that the Court did rely on 16 my testimony in that court. I do not believe that 17 anything was excluded, as I -- I know that there 18 was an issue as to whether I would be allowed to 19 testify about materiality, because there was a 20 decision that materiality was a -- something that 21 the -- that the trier of fact was supposed to 22 determine, based on my expert testimony. 23 But the Court allowed all of my expert 24 testimony and -- and relied upon my expert 25 testimony.</p>	<p style="text-align: right;">Page 21</p> <p>1 Whether it's -- you know, based on legal 2 grounds, it's -- it's appropriate for you to be 3 asking the question, is -- is really not something 4 I know much about, because I'm not a lawyer. 5 Q. In the Apollo case, the materiality issues 6 that you weren't allowed to testify on included 7 your opinions on whether or not certain information 8 was material; is that correct? 9 A. I don't recall specifically, but I think 10 what you said is essentially the tautology, that an 11 opinion about materiality would be about whether 12 information was material. 13 But the Court never said that -- in any 14 context about any part of my opinion -- that there 15 was anything deficient in my analysis or expertise. 16 It was -- the decision about materiality was 17 entirely a legal matter, a debate among the 18 lawyers. 19 Q. And in that case, the materiality issues 20 that you weren't allowed to testify about included 21 your opinions about whether or not information was 22 important to investors; is that correct? 23 A. No, that's actually quite false, 'cause I 24 -- I was allowed to -- I mean, that's why it's hard 25 -- you know, me not being a lawyer, it's hard to</p>

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<p style="text-align: right;">Page 22</p> <p>1 answer all of these questions perfectly. I'll do 2 the best I can. But I was allowed to answer 3 questions about whether the information was 4 important. And I was allowed to answer questions 5 about whether the information would be something 6 that an investor would -- would want to look at in 7 making a determination. 8 But -- but just connecting the dots and 9 drawing the conclusion that that means materiality 10 was something that the judge had asked me not to 11 speak about. 12 Q. Are those different analyses, in your 13 view -- the question of whether information would 14 be something investors would want to look at in 15 making a determination and -- and materiality? 16 MR. SAHAM: I'd object to the form of the 17 materiality. To the extent materiality is an 18 element of a 10(b) claim in the statute, and you 19 know, that all these questions call for a legal 20 conclusion if you're using the word "materiality" 21 in -- in the legal sense, as opposed to, you know, 22 material to an investor in, you know, the common 23 sense sense. 24 So I mean, I think, you know, all the 25 questions, I think you need to either clarify or</p>	<p style="text-align: right;">Page 24</p> <p>1 important to an investor for purposes of valuing a 2 security, or for purposes of making the investment 3 decision. But I know there's a legal definition of 4 materiality; and there's a legal process by which 5 evidence becomes opinions, you know, legal opinions 6 by the -- issued by the Court. 7 And I can't make that -- and -- and with 8 that understanding, that there's that process that 9 takes place. I mean, I -- I would certainly offer 10 an opinion about importance and tell you that it 11 conforms to the financial economic definition of 12 materiality, but as -- as was noted in the Apollo 13 case, it's up to the trier of fact or the Court to 14 determine whether that satisfies a legal definition 15 of materiality. 16 Q. Are you offering opinions as to 17 materiality in this case? 18 A. Again, from a financial analytic point of 19 view, yes. From a financial analytic point of 20 view, I can tell you that the information which the 21 marketplace did not have about the CLASS study was 22 important information that investors would have or 23 did use, in fact, ultimately to -- to value 24 Pharmacia stock and make investment decisions about 25 Pharmacia stock.</p>
<p style="text-align: right;">Page 23</p> <p>1 we're going to object to as calling for a legal 2 conclusion. 3 MR. WANG: Well, I'd ask you to limit your 4 objections to form. 5 Q. But I'm asking -- here I'm using the term 6 "materiality," as you understand it -- if you have 7 an understanding of materiality. 8 A. So what was the question again? 9 MR. SAHAM: Same objection. 10 MR. WANG: Could you read it back for me? 11 Thank you. 12 (Question read back.) 13 A. So you asked -- although it's different 14 analysis in my view? I'm not sure I agree with the 15 premise. 16 Q. My question was, is there any difference 17 in your view between the question of materiality 18 and the question of whether information would be 19 something investors would want to look at? 20 A. Again, I think you're asking the question 21 -- it's probably more appropriate for a lawyer or a 22 law student. 23 As an economist, I can tell you that if -- 24 so I'm asked a question about materiality, what I'm 25 going to investigate is whether the information is</p>	<p style="text-align: right;">Page 25</p> <p>1 So from the financial analytic point of 2 view, it satisfies the financial analytic 3 definition of materiality. 4 You know, whether my opinion is what's all 5 or -- you know, is all that's necessary or even a 6 component of what's necessary for the Court to make 7 the determination that it also satisfies the legal 8 definition of materiality, I can't tell you. 9 Q. All right. So let's return, again, to the 10 information that -- that you say the marketplace 11 did not have about the CLASS study. 12 I believe you referred us to Paragraph 45 13 before; is that correct? 14 A. That's right. 15 Q. Can you tell us what those statements 16 were. 17 A. Well, taken in their entirety, the company 18 said a lot of things, and a lot of things were 19 misleading, because, given the entirety of what 20 they said, they did not tell the market the 21 following: "The press release did not disclose 22 that the entire study results were less favorable 23 to Celebrex in the publicly-reported six-month 24 results, as six of the seven complicated ulcers 25 occurring after the first six months of the CLASS</p>

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<p style="text-align: right;">Page 26</p> <p>1 trial were suffered by patients being treated with 2 Celebrex. The reported GI comparisons worsened 3 after six months, and the statistically significant 4 benefit for Celebrex users not taking aspirin that 5 Defendants reported based upon six months of data 6 for complicated ulcers did not hold for the entire 7 study period." 8 So that information was not available to 9 investors as of the time of the press release; and 10 in fact, was not available to the -- to investors 11 until February 6, 2001 -- nearly 10 months after 12 the start of the class period. 13 "Furthermore, Celebrex failed to establish 14 any statistically significant difference with 15 diclofenac on any of the GI end points considered; 16 and diclofenac was actually numerically superior to 17 Celebrex on one of the two co-primary end points of 18 the study." 19 Again, that information was not available 20 in the initial press release, nor was available or 21 became known to the marketplace through any 22 statements made by Defendants until the posting of 23 the FDA reports on February 6, 2001. 24 Q. Are you an expert in the pharmaceuticals 25 industry?</p>	<p style="text-align: right;">Page 28</p> <p>1 valuing securities, but I'm -- I'm not holding 2 myself out to be specifically an expert in -- in 3 interpretation of medical study data. 4 Q. You're not a doctor; are you? 5 A. Medical doctor? 6 Q. Correct. 7 A. I have a Ph.D. 8 Q. You're not a medical doctor. 9 A. No, I'm not a medical doctor. 10 Q. You're not a -- are you holding yourself 11 out as an expert in medicine? 12 A. No. 13 Q. So let's return to Paragraph 45. This 14 paragraph lists the information that you allege was 15 not disclosed -- strike that. 16 This -- this paragraph lists the 17 information that, in your opinion, was not 18 disclosed prior to the end of the class period, 19 correct? 20 MR. SAHAM: Objection to form as to "class 21 period." 22 MR. WANG: Oh. Okay. I'll revise the 23 question. 24 Q. This -- this information -- strike that. 25 This paragraph, Paragraph No. 45, lists</p>
<p style="text-align: right;">Page 27</p> <p>1 A. Well, I'm not holding myself out to be 2 specifically an expert in the pharmaceuticals 3 industry, but I do have expertise analyzing 4 pharmaceutical companies from a financial analytic 5 point of view. 6 Q. Are you an expert in interpretation of 7 data from medical studies? 8 A. I do have a background in quantitative 9 methods. I think I'm probably better than most 10 people at analyzing this sort of data. 11 Nonetheless, that is not the central 12 expertise that I hold out in this case for -- as -- 13 as the basis for -- for my opinions or the basis 14 for my expertise. 15 Q. Are you holding yourself out to the Court 16 as an expert in that area? 17 A. Well, let's review now. What area? 18 Q. Interpretation of data from medical or 19 pharmaceutical studies. 20 A. I think there are other experts that -- 21 that are speaking to those points. I can 22 understand that. Now, I understand it sufficiently 23 to draw financial analytic conclusions and 24 conclusions about the importance of different 25 information for making investment decisions and</p>	<p style="text-align: right;">Page 29</p> <p>1 the information that you allege was not disclosed 2 prior to February the 6th of 2001; is that correct? 3 A. It summarizes the information. I mean, we 4 can add to that that what was also not disclosed 5 was that Defendants and company insiders, based on 6 their knowing this information, believed that a 7 meaningful label change to Celebrex drug -- with 8 respect to GI risks -- was not likely. 9 So -- so you know, not only is -- was this 10 information specifically not available, but we also 11 know that individuals who had this information 12 inside the company had -- had drawn conclusions 13 that also would have been material to investors and 14 -- and informative to investors if it were made 15 public. 16 Q. Okay. So that relates to intent, but does 17 this -- 18 A. I didn't hear what you said. What? 19 Q. Intent. 20 A. No, I don't know that it relates to 21 intent. You asked me if that information was not 22 available. So I want to point out that -- I just 23 was to clarify that the information in 45 is not 24 available. 25 There's other information about the</p>

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<p style="text-align: right;">Page 30</p> <p>1 interpretation of this data that was also not 2 available to the marketplace. 3 Q. What -- strike that. 4 Is there any information, other than what 5 you've listed here in Paragraph 45, that was not 6 disclosed, in your opinion, about the results of 7 the CLASS study prior to February 6, 2001? 8 MR. SAHAM: Objection to the form. 9 A. There may have been. I mean, I -- I'm not 10 offering an opinion that this is all of it. I'm 11 offering an opinion that this -- that -- that such 12 information comprises this information. There -- 13 there may have been other information. 14 Q. As you sit here now, can you identify 15 anything else? 16 A. No, not as I sit here now, except for -- 17 well, I mean, there is a lot of data and evidence 18 in this case about, you know, what went into 19 getting the JAMA article published. That 20 information, had it been known to the -- to the 21 market, would have been informative, and 22 interesting, and material to the marketplace. 23 I mean, I know -- I know that there -- 24 there must be additional information, just because 25 of, you know, what has been made public, and what I</p>	<p style="text-align: right;">Page 32</p> <p>1 Q. Did you make any effort to calculate or 2 determine the degree of additional inflation that 3 resulted from this alleged misstatement? 4 A. Which one? 5 Q. The JAMA article. 6 A. Well, like I said, I didn't say that it 7 was a new and unique alleged misstatement. I did 8 say that there was information concealed from the 9 marketplace about how the article came about; and 10 the market learned about that in -- in August of 11 2001. I did quantitative analysis surrounding the 12 August event and -- and found that there was no 13 further significant decline in the stock price. So 14 I concluded that there probably was no dissipation 15 or additional increase of inflation that I could 16 trace quantitatively to the JAMA article, beyond 17 what was already in there from the start of the 18 class period, implying, therefore, that the JAMA 19 article served to maintain the inflation that was 20 already in the stock price, caused by the initial 21 misleading and false statements. 22 Q. So would your conclusions on loss 23 causation and damages change in any way if the JAMA 24 article had never been written? 25 A. Well, here you have a hypothetical world</p>
<p style="text-align: right;">Page 31</p> <p>1 have been able to analyze. 2 I understand that there must be additional 3 information and facts that -- and communications 4 that -- that took place that would have been 5 informative to the market, but I did -- I can't 6 cite specifics beyond this and what I've already 7 mentioned. 8 Q. Are you able to identify any other 9 nondisclosed facts that you relied upon in forming 10 your conclusions, as you sit here today? 11 A. I think you just asked that. And I said, 12 beyond this and what I've already mentioned, no. 13 Q. You mentioned the JAMA article just now, 14 the September 13th, 2000 JAMA article. 15 A. Yes. 16 Q. Do you allege that additional 17 misstatements were made in this article? 18 A. I'm not making that allegation. I am 19 saying that the JAMA article reinforced the 20 misinformation and misleading nature of -- of 21 company statements that had been made up to that 22 point, but I -- I'm not -- I did not -- I did not 23 conclude that there is additional information, 24 beyond how the article came about, that was 25 misleading to the marketplace.</p>	<p style="text-align: right;">Page 33</p> <p>1 where the JAMA article was never written. I don't 2 know what else would have happened in this 3 hypothetical world had the JAMA article never been 4 written. So it's -- so it's hard to say. 5 I mean, I -- we know that the company 6 believed that the JAMA article was commercially 7 valuable. Common sense and -- and business 8 analysis tells you that the JAMA article was 9 commercially valuable. So it's altogether possible 10 that the ultimate measurement of inflation may have 11 been impacted. But that's not the world that we 12 actually live in, so I can't draw that conclusion. 13 Q. But notwithstanding that, you don't 14 attribute any additional inflation to the JAMA 15 article. 16 MR. SAHAM: Objection to the form. 17 A. There was -- there was no measurable 18 introduction of inflation on the date of the JAMA 19 article, and no measurable reduction of inflation 20 when more of the facts and circumstances about how 21 the JAMA article came about were ultimately 22 revealed to the marketplace. 23 So I drew the conclusion that the JAMA 24 article maintained the prior inflation, rather than 25 induced a new inflation or dissipated inflation.</p>

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<p style="text-align: right;">Page 34</p> <p>1 Q. Are you able to rule out -- strike that. 2 Did you rule out the possibility that 3 there was additional inflation as a result of the 4 JAMA article, whether it's measurable or not by 5 you? 6 A. Well, there's -- there's no evidence to 7 support that the JAMA article introduced a new 8 inflation. We do know that from the outset -- in 9 fact, even from -- from prior to the undertaking of 10 the CLASS study -- the company mentioned that an 11 objective of the CLASS study would be to publish 12 such an article. 13 So I -- one might argue that, unless the 14 company had disclosed the true results -- the true 15 and full results of the CLASS study, that it was 16 anticipated there would be some sort of coverage by 17 academic journals like JAMA. 18 So it was an anticipated event, consistent 19 with the false and misleading statements. Given 20 the false and misleading statements, it was an 21 anticipated event. 22 Q. So in your expert opinion, was the 23 publication of the JAMA article an event that was 24 important to investors? 25 A. Yes, I believe it was important.</p>	<p style="text-align: right;">Page 36</p> <p>1 opportunities were passed on. 2 But beyond that, had the full truth about 3 the CLASS study been disclosed as of these 4 junctures, it's clear the stock price would have 5 fallen. Given that the full truth about the CLASS 6 study was not revealed to the marketplace in these 7 events, these events clearly then served to 8 maintain the inflation that had been introduced 9 earlier. 10 Q. What effort did you make to determine if 11 there was additional inflation in the stock price 12 as a result of either of these disclosures? 13 A. Well, I -- I examined the stock price 14 movements on these days, and I examined the 15 information; and I didn't see significant stock 16 price movements, nor did I see significantly -- 17 well, I didn't see disclosure of the information 18 that I described previously was concealed. 19 Q. And how did those analyses help you 20 determine whether there was additional inflation in 21 the stock price caused by either of those 22 disclosures? 23 A. Well, if it's not new information, it's 24 not going to introduce new inflation. And if 25 there's not -- I mean, if it's not new information,</p>
<p style="text-align: right;">Page 35</p> <p>1 Q. In your report, you also discuss an April 2 25th, 2000 earnings -- first quarter 2000 earnings 3 and conference call. 4 A. Where are you looking? 5 Q. Page 12. And then also on Page 13, you 6 discuss the May 2000 presentation of CLASS results 7 at the Digestive Disease Week Conference and an 8 accompanying press release. 9 A. You know, I -- I tend to talk very fast, 10 and people complain about that; and I'm having 11 trouble following you. You talk fast too, so... 12 Q. Sure. So I'm on Pages 12 and 13 now. 13 A. Yes. 14 Q. And on these pages, and continuing on to 15 Page 14, at least, you have discussion of two 16 disclosures: One in April -- one on April 25th, 17 2000, and the other in late May 2000. 18 And I have the following question for you 19 about this -- about these: Do you allege that 20 there were any additional misstatements made in 21 either of these disclosures? 22 A. Well, they were reiterations and 23 reinforcements of the previously-made misleading 24 and false statements. There was -- you know, these 25 were opportunities to correct the record. Those</p>	<p style="text-align: right;">Page 37</p> <p>1 it's not going to either introduce or dissipate 2 inflation. That's what I determined. 3 Q. So neither -- sorry. Did you finish? 4 A. Yes. 5 Q. Neither of these disclosures were new 6 information? 7 A. Well, I mean, they're new information that 8 they happened, but they didn't correct the record 9 with respect to the CLASS study. 10 Q. You concluded that the JAMA article did 11 not cause an inflation in -- in the stock price, 12 correct? 13 A. It -- it served to maintain inflation that 14 was in the stock price, certainly. I mean, if the 15 JAMA article had revealed the full truth about all 16 of the CLASS data, I'm quite certain the stock 17 price would have fallen at that time. 18 But that's not what happened in terms of 19 what the JAMA article disclosed; and consequently, 20 that's also not what happened in terms of the 21 inflation dissipating. 22 Q. In April 2000, as a result of the April 23 17th disclosure, there was also no movement in 24 Pharmacia stock price that was statistically 25 significant; is that correct?</p>

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<p>1 A. No. It's not entirely true.</p> <p>2 Q. What's not true about it?</p> <p>3 A. Well, there -- there was a statistically</p> <p>4 significant rise in the stock price on April 19th,</p> <p>5 2000. So you can't just say that there was no</p> <p>6 statistically significant stock price movement</p> <p>7 following the initial press release.</p> <p>8 Q. Well, the stock on April the 17th -- then</p> <p>9 I'll refer you to Exhibit No. 4 of your report, at</p> <p>10 Page 119.</p> <p>11 What was the stock price movement on April</p> <p>12 17th of 2000, the date of the disclosure?</p> <p>13 A. From April 14th to April 17th, the raw</p> <p>14 stock price rose from 50 -- rose a dollar, \$53.13</p> <p>15 on April 14th, 2000; and then closed a dollar</p> <p>16 higher at \$54.13 on April 17th.</p> <p>17 Q. And then what happened the next day?</p> <p>18 A. It fell.</p> <p>19 Q. By about a dollar?</p> <p>20 A. That's right.</p> <p>21 Q. And then on the 19th, as you pointed out,</p> <p>22 it increased?</p> <p>23 A. Over \$6.</p> <p>24 Q. And are you saying that that April 19th</p> <p>25 movement was caused by the April 17th disclosure?</p>	<p>1 misleading.</p> <p>2 Q. It was also stated in this Morgan Stanley</p> <p>3 analyst report; is that correct?</p> <p>4 A. That's right.</p> <p>5 Q. Are you contending the Morgan Stanley</p> <p>6 analyst report was false or misleading in any</p> <p>7 respect?</p> <p>8 A. No. What I'm contending -- or what I'm</p> <p>9 concluding is that the Morgan Stanley analyst</p> <p>10 accepted the representations made by Defendants and</p> <p>11 disseminated them.</p> <p>12 Q. And the Morgan Stanley report clearly</p> <p>13 stated that the -- the CLASS trial fell short of</p> <p>14 its primary end point?</p> <p>15 A. It did, and then -- and then went on to</p> <p>16 discuss other clinical results from the clinical</p> <p>17 test that were misleading, as -- reporting what the</p> <p>18 company had announced.</p> <p>19 Q. The Morgan Stanley analyst in this report</p> <p>20 state that they had, quote, "anticipated the study</p> <p>21 to corroborate" unquote --</p> <p>22 A. It did.</p> <p>23 Q. -- "GI safety profile of Celebrex"?</p> <p>24 A. That's right. In fact, many analysts did.</p> <p>25 Most analysts did.</p>
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<p>1 A. I didn't draw that conclusion. I don't</p> <p>2 think we can rule it out, but I didn't draw that</p> <p>3 conclusion.</p> <p>4 Q. Did you make any effort to evaluate the</p> <p>5 causal relationship?</p> <p>6 A. I did.</p> <p>7 Q. And you were not able to conclude -- is</p> <p>8 that correct -- that the April 17th disclosure</p> <p>9 caused the April 19th disclosure?</p> <p>10 A. One way or the other, correct. I mean,</p> <p>11 this is an area that, perhaps, we can all look at</p> <p>12 further.</p> <p>13 Q. Let me call your attention to Paragraph 47</p> <p>14 of your report.</p> <p>15 In this paragraph, you note at the outset</p> <p>16 that the CLASS trial fell short of its primary end</p> <p>17 point.</p> <p>18 Do you see that?</p> <p>19 A. One moment. (Witness reviews document.)</p> <p>20 Yes, I do.</p> <p>21 Q. That was a fact that was publicly</p> <p>22 disclosed in April of 2000?</p> <p>23 A. It was -- it was publicly disclosed in</p> <p>24 April 2000. But again, in the context of a press</p> <p>25 release that contained other statements that were</p>	<p>1 Q. So most analysts had already anticipated</p> <p>2 the study to corroborate the GI safety profile of</p> <p>3 Celebrex?</p> <p>4 A. Right. And it would have been a real</p> <p>5 game-changer if they had heard the truth about the</p> <p>6 CLASS data, which is, that, over the full 12</p> <p>7 months, the results were far worse than what they</p> <p>8 were reported to be for the first six months of</p> <p>9 data; and that Celebrex failed to beat diclofenac</p> <p>10 by a statistically-significant amount on any of the</p> <p>11 metrics, among other factors.</p> <p>12 Q. Is it fair to say, in your opinion, that</p> <p>13 the high valuation of Pharmacia was due, in part,</p> <p>14 to the market's belief that Celebrex had a good GI</p> <p>15 safety profile?</p> <p>16 MR. SAHAM: Objection to form.</p> <p>17 A. Well, "high" is relative.</p> <p>18 Q. Okay. Let me restate it.</p> <p>19 Was the market's belief that Celebrex had</p> <p>20 a positive GI safety profile reflected in</p> <p>21 Pharmacia's stock price prior to April 17th, 2000?</p> <p>22 MR. SAHAM: Same objection.</p> <p>23 A. Well, I think we need to be a little more</p> <p>24 precise with the language.</p> <p>25 What we know, from reading the analyst</p>

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<p style="text-align: right;">Page 42</p> <p>1 reports, is that their anticipation that the study 2 would corroborate a high safety -- a good safety 3 profile, that information was embedded in the stock 4 price. And that information would -- that those 5 opinions would have been altered with disclosure of 6 the full CLASS data at the start of the class 7 period. 8 Q. So the April 17th, 2000 disclosure 9 reinforced the market's understanding and 10 expectation with respect to Celebrex? 11 A. I wouldn't say reinforced it. I would say 12 it was consistent with their prior expectation. 13 But what's key is to understand that, had the full 14 truth been revealed at that point in time, their -- 15 their understandings and their valuations would 16 have been revised. 17 Q. Is there anything in the April 17th 18 disclosure that, in your opinion, caused Pharmacia 19 stock price to go up, given that the market already 20 had a prior expectation about the positive GI 21 safety profile? 22 A. Well, when you say, "up," I mean, up 23 relative to where it had been, or up relative to 24 where it would have gone? 25 Q. The former. Up relative to where it was</p>	<p style="text-align: right;">Page 44</p> <p>1 market had -- had been expecting. 2 So I mean, it's -- so either scenario is 3 possible. It's either possible that the stock 4 price wouldn't budge at all -- I mean, I told you, 5 this is why I didn't draw a conclusion about the 6 causative -- the causation on the price movement. 7 Although I do have an opinion about the causation 8 of inflation on that day. 9 But we -- we know for sure that there's -- 10 that there's new inflation that's in the price at 11 the end, after this information is introduced that 12 hadn't been there before, because we know that the 13 stock price would have fallen, had the full truth 14 been disclosed. And the reason we know the stock 15 price would have fallen had the truth been 16 disclosed at that date, is later we see that the 17 stock price does fall significantly when the truth 18 is disclosed. 19 Q. You're not contending that the April 17th 20 press release was -- was complex or difficult to 21 understand; are you? 22 MR. SAHAM: Objection to form. 23 A. Well, I believe the data behind the price 24 is certainly complex and difficult to understand. 25 The statements made by the company were</p>
<p style="text-align: right;">Page 43</p> <p>1 the day before April the 17th. 2 A. I mean, I -- I rely on the market to make 3 these valuation determinations; and I observe what 4 the market determined. The stock price on the 5 first day was higher, but not statistically 6 significant. 7 Over the first three days, the stock price 8 is statistically significantly higher than where it 9 was. Some information entered the marketplace that 10 caused the stock price to be higher on April 19th, 11 2000, than it had been on April 14th, 2000. That's 12 -- that's what I can -- that's what I can conclude 13 from -- from quantitative analysis of -- of those 14 prices. 15 Q. Well -- and why, logically, would the 16 stock price go up if the market already anticipated 17 and expected these events? 18 A. Well, I mean, you're asking me to 19 speculate. I'd rather not speculate. We know that 20 there was no statistically significant increase on 21 the first day, but there was a statistically 22 significant increase over the three days; and we 23 know that the CLASS results, as they were described 24 by Defendants, was consistent -- well, inconsistent 25 with the full truth, but consistent with what the</p>	<p style="text-align: right;">Page 45</p> <p>1 false and misleading. So in some sense, they were 2 complex as well. 3 Q. Are you contending that the market took 4 three days to understand the April 17th press 5 release? 6 A. I'm contending that they might have. 7 Q. Why? 8 A. I don't see any other information that 9 entered the marketplace over those three days that 10 can explain these stock price movements. 11 Q. Isn't that -- 12 A. And -- and one other thing is -- is the 13 dollar change in price over those three days was 14 consistent with the dollar change in price at the 15 end of the class period -- or near the end of the 16 class period -- when the truth became known. 17 So there's certainly evidence suggesting 18 that it was these false and misleading statements 19 that caused the price to rise, in addition to the 20 inflation rising, you know. But as I said, I mean, 21 I'm stopping short of drawing that conclusion. 22 Q. Is it inconsistent with an inefficient 23 market for a stock price not to react until the 24 third day after a disclosure that is just a few 25 pages long?</p>

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<p style="text-align: right;">Page 46</p> <p>1 MR. SAHAM: Objection to form.</p> <p>2 A. No, that's not true at all. Efficient</p> <p>3 market -- in an efficient market, the stock price</p> <p>4 reflects the market's understanding of information</p> <p>5 available to it at that time. But the market's</p> <p>6 understanding of a particular set of information --</p> <p>7 especially complex information -- may take more</p> <p>8 than a moment to be arrived at and -- and to fully</p> <p>9 digest the -- the content of the information.</p> <p>10 So whereas prices quickly reflect the</p> <p>11 market's understanding, the market's understanding</p> <p>12 might evolve somewhat more slowly. And this is a</p> <p>13 view that is consistent with the academic</p> <p>14 literature on the subject.</p> <p>15 I mean, even go back to Eugene Fama's 1970</p> <p>16 article -- the seminal article on -- on market</p> <p>17 efficiency, he understands that the market</p> <p>18 sometimes takes more than a day to -- to arrive at</p> <p>19 its opinions and -- and understand information.</p> <p>20 And as I said in the report, you've seen it before.</p> <p>21 You know, Patell and Wolfson say the same thing.</p> <p>22 Doctor Lane says the same thing. Numerous</p> <p>23 empirical studies acknowledge that it -- it doesn't</p> <p>24 have to be instantaneous, or even one day.</p> <p>25 Q. What was complex or difficult to</p>	<p style="text-align: right;">Page 48</p> <p>1 glowing terms, and -- and in terms of being very</p> <p>2 successful, but not entirely a hundred percent</p> <p>3 consistent with maybe what the market had expected</p> <p>4 the study to show.</p> <p>5 Q. But the data and the results weren't</p> <p>6 released in April of 2000; is that correct?</p> <p>7 A. I'm sorry. Say that again.</p> <p>8 Q. The underlying CLASS data and underlying</p> <p>9 CLASS -- the -- strike that.</p> <p>10 The additional details regarding the CLASS</p> <p>11 study were not released at this point in time,</p> <p>12 correct?</p> <p>13 MR. SAHAM: Objection to form.</p> <p>14 A. My understanding is, that's right. And --</p> <p>15 but -- but some data, as you can see right in the</p> <p>16 press release, is being described.</p> <p>17 Q. And what's complex about what's being</p> <p>18 described? Strike that.</p> <p>19 What's complex about what -- understanding</p> <p>20 what's described in this press release?</p> <p>21 A. I -- I think I already answered that</p> <p>22 question. These aren't easy issues to -- to</p> <p>23 analyze.</p> <p>24 On the one hand, the company is -- one</p> <p>25 moment. (Witness reviews document.) I can</p>
<p style="text-align: right;">Page 47</p> <p>1 understand about the press releases issued on April</p> <p>2 17th in particular?</p> <p>3 A. Well, how the company could still say that</p> <p>4 they were successful in the CLASS study, having</p> <p>5 missed their end point. I mean, describing dual</p> <p>6 end points, describing aspirin versus nonaspirin.</p> <p>7 You know, six months versus -- well, I'll show you.</p> <p>8 Let me see the press release. I'll show</p> <p>9 you one thing in particular that would certainly --</p> <p>10 would give me pause.</p> <p>11 MR. SAHAM: Yeah. That's Exhibit 67 if</p> <p>12 you guys just want to --</p> <p>13 MR. WANG: So we'll mark it -- we'll refer</p> <p>14 to it as Exhibit No. 67.</p> <p>15 (Exhibit 67, previously marked.)</p> <p>16 A. I mean, you know, it says that -- it's</p> <p>17 right here. It says -- and I'm looking at third</p> <p>18 paragraph, "The celecoxib long-term arthritis</p> <p>19 safety study, an approximately 13-month,</p> <p>20 multi-center, randomized, double-blind outcome</p> <p>21 trial of about 8,000 patients --" then it goes on</p> <p>22 to describe, you know, the study, I mean, it's is</p> <p>23 -- leave it at this. It's not easy.</p> <p>24 I mean this is -- this is a complex study,</p> <p>25 with -- and results that are being described -- in</p>	<p style="text-align: right;">Page 49</p> <p>1 summarize it by saying there's -- there's -- it</p> <p>2 takes a little bit of -- of time to understand how</p> <p>3 the study results can be cast as so successful,</p> <p>4 despite the fact that they missed a primary end</p> <p>5 point.</p> <p>6 I mean, they go into great detail about</p> <p>7 that, but it would take -- it's not -- it's not</p> <p>8 extremely easy to understand.</p> <p>9 Q. What do you need to do?</p> <p>10 What takes two days?</p> <p>11 MR. SAHAM: Objection to the form.</p> <p>12 A. Well -- (witness reviews document.)</p> <p>13 Have a look at Page 91 of my report.</p> <p>14 Q. Okay.</p> <p>15 A. And what you'll notice is, we have a lot</p> <p>16 of analyst reports being published over the time</p> <p>17 frame from April 14th, 2000, to April 19th, 2000</p> <p>18 about Pharmacia or Pfizer. So one thing that</p> <p>19 someone, who may have been confused about what the</p> <p>20 meaning of this press release really was, would</p> <p>21 want to do is see what other people are saying</p> <p>22 about it. And they would want to read the analyst</p> <p>23 reports that were describing it.</p> <p>24 And if the analysts took more than one</p> <p>25 day, well, then someone who's depending on the</p>

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<p style="text-align: right;">Page 50</p> <p>1 analyst to inform their opinion of valuation or 2 investment decisions will also have to take more 3 than one day. 4 Q. So are you saying the market sits there 5 and waits for analysts to digest materials before 6 it's able to understand a disclosure, even in an 7 efficient market? 8 A. Well, I don't know if "sits there" is the 9 proper word. But we know that analyst reports and 10 analyst coverage serves a purpose. Analyst 11 coverage helps make the market efficient. 12 Efficiency means the process by which information 13 gets into and digested by the marketplace. 14 If analyst reports serve a purpose in 15 making the market efficient, then we know that 16 analyst reports are relied upon by people. And if 17 the analysts take two days to write their reports, 18 the stock price may take two days to fully reflect 19 a new understanding of what the data means. 20 Q. So are you saying that a stock price 21 won't, in an efficient market, fully reflect 22 publicly-disclosed information until after analysts 23 issue their reports? 24 A. It will reflect the market's understanding 25 of the information. And as the understanding</p>	<p style="text-align: right;">Page 52</p> <p>1 than a day. I mean, you know, sometimes the 2 textbooks will say, "rapid," but they don't 3 necessarily mean instantaneous. 4 One thing we all must understand is the 5 marketplace is populated by human beings. And 6 human beings, especially highly-paid analysts, may 7 be very good at doing their job, but they're not 8 super-human. I mean, if the information is 9 difficult, they're going to take time -- they're 10 going to need time to understand it; and as much 11 time as they need to understand the complex and 12 voluminous information is how much time at least 13 the market will need to fully reflect that 14 information in the price. 15 Q. But here, with respect to the April 17th 16 release, analysts put out reports the same day and 17 the next day, correct, April 17th and April 18th? 18 A. Right. And then those reports get 19 disseminated, and new investors read it, and 20 understand it, and their opinions and investment 21 decisions are informed by that. 22 Q. Analysts at least were able to understand 23 the information essentially immediately, correct? 24 MR. SAHAM: Objection. 25 A. No, I did -- again, I mean, you're talking</p>
<p style="text-align: right;">Page 51</p> <p>1 changes, which may change with analyst coverage and 2 analyst interpretation, how it's reflected in the 3 price may also change. 4 Q. The market will immediately reflect the 5 market's understanding of information that's 6 publicly disclosed -- is that correct -- of an 7 efficient market? 8 A. When there are trades, the trading price 9 will reflect the market's current understanding of 10 the information that's available. But if the 11 information is voluminous and complex and takes 12 more time to be digested, the market's 13 understanding may change; and as the market's 14 understanding changes, the price will change. 15 And so because the process of the 16 understanding fully digesting the information, the 17 stock price may sometimes take time to fully adjust 18 to new information or a release. 19 And this is not just me saying it. I 20 mean, from the very earliest papers on market 21 efficiency, on -- you know, the theoreticians 22 pointed out that this can take more than a day. 23 And then, you know, we've got 30, 40 years of -- of 24 studies on this, where people use multi-day 25 windows, acknowledging that it often takes more</p>	<p style="text-align: right;">Page 53</p> <p>1 about an area where I already told you that I 2 haven't formed an opinion. I'm -- more work could 3 be done in this area, but certainly, it's -- I 4 don't -- some analysts may have. 5 Some analysts, you know, may have -- you 6 know, rushed out early impressions, and other 7 analysts took a little more time. 8 Q. All of the allegedly-undisclosed facts 9 that we've been discussing -- strike that. 10 Let me refer you to Paragraph 45, in 11 particular, of your report, which is what I think 12 you called our attention to before. 13 All of this information that -- 14 MR. SAHAM: He said 45? Sorry. 15 MR. WANG: Yeah, Paragraph 45. 16 Q. All of the information that allegedly 17 wasn't disclosed in April of 2000, as stated in 18 this paragraph, was disclosed on February the 6th 19 of 2001; is that correct? 20 A. The data was made available on that day, 21 that's right. 22 Q. And -- 23 A. The data was made available on that day, 24 but it was accompanied by at least two sources of 25 -- of countervailing, confounding representations.</p>

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<p>1 But yeah.</p> <p>2 Q. And it was also accompanied by FDA review</p> <p>3 materials, correct?</p> <p>4 A. That's right.</p> <p>5 Q. You're not referring to those as</p> <p>6 confounding pieces of information; are you?</p> <p>7 A. No.</p> <p>8 Q. One of which was a medical officer review?</p> <p>9 A. That's right.</p> <p>10 Q. Another of which was a statistical</p> <p>11 reviewer's briefing report?</p> <p>12 A. That's right.</p> <p>13 Q. And both of those materials contained the</p> <p>14 information that Paragraph 45 says was not</p> <p>15 disclosed at an earlier point in time, correct?</p> <p>16 A. That's my understanding. That's right.</p> <p>17 Q. And --</p> <p>18 A. Again, you know, after -- after nearly a</p> <p>19 year of a misinformation campaign, making</p> <p>20 representations that obscure these facts -- the</p> <p>21 Defendants having made representations that</p> <p>22 obscured these facts and concealed these facts.</p> <p>23 Q. But you're not saying the FDA made any of</p> <p>24 those misrepresentations or concealments, correct?</p> <p>25 A. I don't think they did.</p>	<p>1 that's from the FDA itself.</p> <p>2 But I agree with you. I think it was the</p> <p>3 6th.</p> <p>4 Q. The information provided to the market on</p> <p>5 February the 6th corrected Defendants' alleged</p> <p>6 prior false or misleading statements about the</p> <p>7 CLASS study?</p> <p>8 A. When you say, "corrected," do you mean</p> <p>9 corrected in terms of inflation, or corrected in</p> <p>10 terms of information?</p> <p>11 Q. Corrected in terms of information.</p> <p>12 A. I can't even go that far, because the data</p> <p>13 was available, but I do believe it took the market</p> <p>14 longer than one day -- longer than two days. I</p> <p>15 believe it took three days for the market to digest</p> <p>16 this new revelation that was so contrary to what</p> <p>17 they had been led to believe by a year of</p> <p>18 representations that were misleading and false by</p> <p>19 the Defendants.</p> <p>20 Plus, there were additional confounders on</p> <p>21 that same day. I mean, on that very same day,</p> <p>22 you've got Fred Hassan touting the JAMA article at</p> <p>23 a Merrill Lynch conference, still saying -- you</p> <p>24 know, still touting six-month results, and not</p> <p>25 disclosing at that event that the results were far</p>
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<p>1 Q. The FDA medical officer reviewer report</p> <p>2 disclosed the information that you have listed here</p> <p>3 in Paragraph 45 as allegedly previously not</p> <p>4 disclosed; is that correct?</p> <p>5 A. That's right.</p> <p>6 Q. And that was released the morning of</p> <p>7 February the 6th?</p> <p>8 A. Well, we don't know exactly the time. I</p> <p>9 know that -- I know that Doctor Fiorino says that</p> <p>10 he's able to pinpoint the time. But I also know</p> <p>11 that affidavit by an FDA person certifying when the</p> <p>12 information was released has a different date.</p> <p>13 So I'm not exactly sure if we can pinpoint</p> <p>14 the exact time.</p> <p>15 Q. When do you believe that the FDA review</p> <p>16 report was released?</p> <p>17 A. Well, as I said in the report, on or about</p> <p>18 the 6th or 7th. I believe it's on or about the</p> <p>19 6th.</p> <p>20 Q. Aren't you aware that the -- Bloomberg</p> <p>21 issued an article the morning of the 6th concerning</p> <p>22 the FDA review materials?</p> <p>23 A. I -- that's -- that's right. But there is</p> <p>24 this other piece of evidence, I mean, that has to</p> <p>25 be addressed somehow, and it says the 7th. And</p>	<p>1 worse over 12 months than they were over six</p> <p>2 months; not disclosing at that event, on the very</p> <p>3 same day, February 6, 2001, that diclofenac was --</p> <p>4 that Celebrex could not establish a statistically</p> <p>5 significant benefit over diclofenac on any of the</p> <p>6 end points or any of the measures; and that, you</p> <p>7 know, it's sort of like the center point -- the</p> <p>8 centerpiece of their result; that they were stating</p> <p>9 would -- you know, that they were relying on to</p> <p>10 help them get a label change that, among nonaspirin</p> <p>11 users, the primary end point was satisfied for the</p> <p>12 pooled group, clearly slowed the digestion of the</p> <p>13 new information as it was presented on the FDA Web</p> <p>14 site.</p> <p>15 Q. My question was, did the new information</p> <p>16 provided to the market on February the 6th correct</p> <p>17 Defendants' prior false or misleading statements</p> <p>18 about the CLASS study?</p> <p>19 A. It did not correct the artificial</p> <p>20 inflation that had been introduced by the false and</p> <p>21 misleading statements made earlier.</p> <p>22 Q. Okay. Did it correct -- strike that.</p> <p>23 Let me just restate the question in its</p> <p>24 entirety.</p> <p>25 Did the information provided to the market</p>

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<p style="text-align: right;">Page 58</p> <p>1 on February the 6th correct the statements that you 2 allege were misleading because they failed to 3 disclose the information in Paragraph 45? 4 A. I -- I can't say that either. It 5 initiated a process by which the market, over a 6 course of three days, learned the truth. The data 7 was there, but the digestion, interpretation, and 8 understanding of the data took longer for all the 9 reasons that I -- that I cited, and the reasons 10 that you know about as well. 11 Q. Can you point to any disclosure after the 12 6th that corrected the statements made in Paragraph 13 45? 14 A. Well, I -- again, disclosures -- I mean, 15 how are you using "disclosures"? 16 I mean, the data was presented, although 17 it was confounded by at least two sources of -- of 18 countervailing misrepresentations and -- and 19 misleading statements on the same day. 20 So I guess we can say the fact that the 21 next day Defendants informed censoring theory was 22 not argued at the FDA hearing could be considered a 23 corrective disclosure. I mean, you could -- I mean 24 it loosely defined -- you know, the fact that it 25 was -- that it was not there, that it was obviously</p>	<p style="text-align: right;">Page 60</p> <p>1 reviewers contain and analyze CLASS data from the 2 entire study," correct? And those reports were 3 posted on the FDA Web site. 4 Do you see that? 5 A. I do. 6 Q. And then in the next sentence you state 7 that, "The new information provided to the market 8 was voluminous and complex, scientific, medical, 9 and statistical information, but corrected 10 Defendants' prior, false or misleading statements 11 about the CLASS study." 12 Do you see that? 13 A. Yeah. I mean, let me clarify. What that 14 means is that the data is now available -- data 15 that had not been previously available. But we've 16 got to be careful how we interpret the word 17 "corrective" and I mean "corrective disclosure." 18 It did not at that time correct and cure the 19 artificial inflation that was in the stock price. 20 What was available at that point in time 21 was the data that would allow that process to take 22 place. 23 Q. But it -- the new information disclosed on 24 the 6th did correct Defendants' prior, false or 25 misleading statements.</p>
<p style="text-align: right;">Page 59</p> <p>1 abandoned at that point in time. I mean, the 2 market may have noticed that. 3 The discussions by the FDA on February 7th 4 I'm sure facilitated the market's digestion and 5 understanding of the new data that had been made 6 available to them. Analyst reports on February 8th 7 -- I mean, "CLASS Flunked Out" is the title of one 8 analyst report that's made on February 8th -- 9 facilitated the market's understanding of the 10 import of this new data that was made available to 11 them. 12 And whether you describe them from a legal 13 point of view as being new disclosures or 14 developments that helped the market understand the 15 data that was earlier made available, I -- you 16 know, it's a legal matter. 17 But that's the course of the events, how 18 it unfolded, and why it took three days for the 19 price to be corrected. 20 Q. Well, let's take a look at Paragraph 246 21 of your report. 22 A. (Witness reviews document.) So -- 23 Q. So in the first sentence here you say 24 that, "Prior to the February 7th advisory committee 25 meeting on or about the 6th, reports written by FDA</p>	<p style="text-align: right;">Page 61</p> <p>1 A. Sure. If you dig through all of the 2 information that was available -- if you dig 3 through and eliminate Fred Hassan's comments and 4 presentation at the Merrill Lynch conference that 5 same day, and if you dig through and eliminate 6 confounding information that's in the Defendants' 7 briefing book that's presented that same day, if 8 you dig through and eliminate prior misconceptions 9 about the CLASS data that were formulated by over 10 -- almost a year of a misinformation campaign, if 11 you dig through and eliminate everything you had 12 been led to believe about the JAMA article 13 validating -- validation of the study, then that 14 data was available for your understanding to be 15 corrected. 16 But that process takes more than a day. 17 So it's possible -- I mean, the information was 18 available. We now know what information was there 19 that corrected the falsehoods. But the market took 20 time to get to that information, focus on that 21 information, and digest that information. 22 Q. But that information came out on the 6th? 23 A. It was made available on the 6th, but it 24 was -- it took more time to understand and 25 appreciate in the context of what had happened in</p>

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<p style="text-align: right;">Page 62</p> <p>1 this case.</p> <p>2 Q. And you refer to the underlying data</p> <p>3 several times, but the FDA review reports</p> <p>4 themselves corrected these prior statements; isn't</p> <p>5 that correct?</p> <p>6 MR. SAHAM: Objection. Asked and</p> <p>7 answered. Form.</p> <p>8 A. They -- they have explanations and</p> <p>9 interpretations of the data that facilitate the</p> <p>10 market's understanding.</p> <p>11 Q. Both the FDA medical office reviewer</p> <p>12 report and also the FDA statistical reviewer's</p> <p>13 briefing document contained each of the pieces of</p> <p>14 information that you describe in Paragraph 45;</p> <p>15 isn't that correct?</p> <p>16 A. I believe that's correct.</p> <p>17 Q. And as we discussed earlier, there was a</p> <p>18 Bloomberg report that issued the morning of the</p> <p>19 6th.</p> <p>20 Bloomberg was able to -- to quickly and</p> <p>21 swiftly report on the materials released that day;</p> <p>22 isn't that correct?</p> <p>23 A. Can we -- can we see that Bloomberg?</p> <p>24 Q. Sure.</p> <p>25 MR. WANG: Do you know the previous</p>	<p style="text-align: right;">Page 64</p> <p>1 Q. The company's not an analyst, right?</p> <p>2 A. Right. That would -- I mean, if that's</p> <p>3 picked up by the analysts, then the analysts will</p> <p>4 be saying that as well.</p> <p>5 I mean, I don't -- I mean, we can see the</p> <p>6 analysts taking multiple days to analyze that data.</p> <p>7 That implicitly informs me, and -- and anyone who's</p> <p>8 studying this thing, that the data is complex.</p> <p>9 That it's voluminous is self-evident. I mean,</p> <p>10 hundreds of pages of medical data. I mean, look at</p> <p>11 this. This is -- (witness reviews document.)</p> <p>12 MR. SAHAM: And he's looking at Exhibit</p> <p>13 314, which I think --</p> <p>14 MR. WANG: Which you handed him.</p> <p>15 MR. SAHAM: Yeah. I mean, these materials</p> <p>16 -- and you guys are welcome to, you know, make a</p> <p>17 copy or whatever. These are some tabbed,</p> <p>18 highlighted, you know, materials that he has</p> <p>19 referenced in his report, and you know, facilitates</p> <p>20 his answering your questions.</p> <p>21 A. Well, I mean, it says that, you know, the</p> <p>22 company press release on the 7th says that the --</p> <p>23 "This was an extremely rigorous and complex trial,</p> <p>24 and it was difficult for the committee to analyze."</p> <p>25 I mean, that tells you that this is</p>
<p style="text-align: right;">Page 63</p> <p>1 exhibit number?</p> <p>2 MR. SAHAM: I'm not sure if this has been</p> <p>3 previously marked. I don't think it has. Maybe if</p> <p>4 you start that as a thousand, just if you guys are</p> <p>5 okay with that.</p> <p>6 Q. While we're looking for that, can I -- let</p> <p>7 me ask you a few more questions: Did any analysts</p> <p>8 say on February the 6th that all this information</p> <p>9 was complex, and they needed a few days to get</p> <p>10 through it?</p> <p>11 A. Well, we know that J.P. Morgan, their</p> <p>12 team, including Doctor Fiorino, said the next day</p> <p>13 that it was thorny; that the data was thorny, much</p> <p>14 thornier than they anticipated it to be.</p> <p>15 Q. They said -- did any analysts say that the</p> <p>16 information was complex and voluminous, and they</p> <p>17 needed a few days to -- to understand it?</p> <p>18 MR. SAHAM: Objection to form. You say in</p> <p>19 a report or -- calls for speculation.</p> <p>20 Q. Anywhere to your knowledge say orally or</p> <p>21 in a report or in any writing that you're aware of,</p> <p>22 did any analyst?</p> <p>23 A. Well, I know that -- I know that the</p> <p>24 company press release on the 12th -- I believe it</p> <p>25 was -- they said it was complex.</p>	<p style="text-align: right;">Page 65</p> <p>1 difficult, and complex, and voluminous information.</p> <p>2 Q. The --</p> <p>3 A. I believe there was -- there were comments</p> <p>4 in the -- in the conference call -- I believe that</p> <p>5 was February 12th -- where -- where, again, it was</p> <p>6 mentioned that it was complex information.</p> <p>7 We have Doctor Fiorino himself saying that</p> <p>8 it was thorny.</p> <p>9 What else do you need?</p> <p>10 Q. I'm not asking about whether the study or</p> <p>11 the trial was complex or rigorous. I'm asking you</p> <p>12 if the data reported on February 6th and the FDA</p> <p>13 review reports disclosed on February the 6th, with</p> <p>14 respect to those, are you aware of any analysts</p> <p>15 saying that that data and reports were complex or</p> <p>16 difficult to understand for them?</p> <p>17 MR. SAHAM: Objection to the form.</p> <p>18 A. I wouldn't expect analysts to say that the</p> <p>19 information presented is beyond them. That's just</p> <p>20 not how they keep their jobs. But I think, you</p> <p>21 know, their behavior and what they did write speaks</p> <p>22 to it being complex and voluminous data.</p> <p>23 Q. And you don't expect -- so you say you</p> <p>24 don't expect them to say it or you wouldn't expect</p> <p>25 them to say it, but are you aware of them saying</p>

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<p style="text-align: right;">Page 66</p> <p>1 that?</p> <p>2 A. Well, I did tell you already, thorny -- I</p> <p>3 think thorny data is -- is complex data; and -- and</p> <p>4 that's -- your own Doctor Fiorino said that.</p> <p>5 THE WITNESS: Can we take a quick break?</p> <p>6 MR. WANG: Sure. Why don't we break for</p> <p>7 five minutes.</p> <p>8 VIDEO OPERATOR: The time is 10:21. We're</p> <p>9 now off the record.</p> <p>10 (Recess was taken.)</p> <p>11 VIDEO OPERATOR: The time is 10:41. We</p> <p>12 are now back on the record.</p> <p>13 Q. Okay. Professor Feinstein, we've been</p> <p>14 talking -- at various points you've made references</p> <p>15 to the event study that you did.</p> <p>16 Can you describe what an event study is,</p> <p>17 and the objective.</p> <p>18 A. Sure. An event study is a quantitative</p> <p>19 analysis on stock prices. It's aimed at</p> <p>20 determining whether a particular piece of</p> <p>21 information or company-specific information, in</p> <p>22 general, has caused a movement in the security</p> <p>23 price.</p> <p>24 Q. And how did you go about doing that in</p> <p>25 this case?</p>	<p style="text-align: right;">Page 68</p> <p>1 just described.</p> <p>2 There's also -- dividends are taken into</p> <p>3 account by -- if there's a dividend paid on a</p> <p>4 particular day -- other, rather, if it's the</p> <p>5 ex-ante date for the dividends, we'd add the</p> <p>6 dividend to the current day's stock price before</p> <p>7 dividing it by the previous day's stock price.</p> <p>8 Then -- then we run a regression -- when I</p> <p>9 say, "we," I mean anyone in the profession; this is</p> <p>10 the generally-accepted methodology. You run a</p> <p>11 regression, which is a statistical technique for</p> <p>12 decomposing any variable -- in this case the</p> <p>13 returns -- into component factors -- factors that</p> <p>14 influence that -- that variable.</p> <p>15 So the regression model that I used -- and</p> <p>16 most people use for security price event studies --</p> <p>17 is, we use a constant term to capture any trends --</p> <p>18 time trends, as an explanatory variable. We use a</p> <p>19 market index, and I used a market -- I used CRISP</p> <p>20 market index -- C-R-I-S-P -- Center For Research</p> <p>21 and Security Prices. It's data provided by the</p> <p>22 University of Chicago Research Center; and a sector</p> <p>23 index factor, in order to control for the influence</p> <p>24 on security returns of information about the</p> <p>25 general sector, rather than the company in</p>
<p style="text-align: right;">Page 67</p> <p>1 A. Well, it's described in my report,</p> <p>2 beginning on Page 36.</p> <p>3 Q. And are you able to give us a brief</p> <p>4 explanation, as you sit here today?</p> <p>5 A. Yes.</p> <p>6 Q. Can you go ahead and do so.</p> <p>7 A. (Witness reviews document.) Okay. It</p> <p>8 involves a number of steps.</p> <p>9 One wishes to factor out from -- well, one</p> <p>10 needs to calculate returns from the prices first,</p> <p>11 because the movements in stock prices or security</p> <p>12 prices are best analyzed in terms of changes in the</p> <p>13 stock or security prices. And the</p> <p>14 generally-accepted methodology is to use what's</p> <p>15 called log normal returns, where we take the --</p> <p>16 take the price on a given day, divide it by the</p> <p>17 price on the previous day, and take the natural</p> <p>18 logarithm of that quotient.</p> <p>19 That's -- that would be return. It's --</p> <p>20 it's usually numerically quite close to the</p> <p>21 percentage price change. But there are some</p> <p>22 statistical and mathematical advantages to using</p> <p>23 logarithmic returns, rather than percentage price</p> <p>24 changes. So the first step is to convert a price</p> <p>25 series into a return series in the manner I -- I</p>	<p style="text-align: right;">Page 69</p> <p>1 particular.</p> <p>2 Now, do you want me to describe this more</p> <p>3 in general terms, or specifically how it was done</p> <p>4 for this case? Because --</p> <p>5 Q. Why don't you keep going.</p> <p>6 A. Well, which way? General -- at this</p> <p>7 point, I'm at a juncture. I could either --</p> <p>8 Q. Be specific.</p> <p>9 A. Specific or general? Okay. So --</p> <p>10 Q. Well, why don't you finish with the other</p> <p>11 variable, other explanatory variables.</p> <p>12 A. Well, I want to describe more about the</p> <p>13 market index and the sector index.</p> <p>14 Q. Okay. Then maybe let me -- if you don't</p> <p>15 mind, let me focus you then, and ask you a</p> <p>16 different question.</p> <p>17 Can I have you first lay out the</p> <p>18 explanatory variables that are part of your</p> <p>19 regression analysis.</p> <p>20 A. Sure. That's actually --</p> <p>21 Q. You've enumerated the constant variable,</p> <p>22 the market index, and the sector index so far, I</p> <p>23 believe.</p> <p>24 A. That's right, so the -- I use the CRISP</p> <p>25 market total return index --</p>

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<p style="text-align: right;">Page 70</p> <p>1 Q. Uh-huh.</p> <p>2 A. -- converted into log normal returns to</p> <p>3 capture the market sector -- the market factor.</p> <p>4 So in other words, if there was a large</p> <p>5 stock market movement on a particular day that</p> <p>6 moved all stocks, I would factor that out of the</p> <p>7 analysis so that we can focus more specifically and</p> <p>8 directly on just Pharmacia. You know, we factor</p> <p>9 out sort of like the tide that's affecting all</p> <p>10 stocks.</p> <p>11 The sector -- to -- to factor out the</p> <p>12 sector effect, I use the Dow Jones US</p> <p>13 Pharmaceutical Index, but I've reconstructed it to</p> <p>14 remove Pharmacia, Pfizer, and Merck. Pharmacia,</p> <p>15 because it's the subject company; Pfizer, because</p> <p>16 they're also going to be affected by</p> <p>17 Celebrex-related news; and Merck also conceivably</p> <p>18 could be affected by Celebrex-related news. And</p> <p>19 since the events in this case are related to</p> <p>20 Celebrex, it was necessary to remove those factors.</p> <p>21 Otherwise, it would obscure information -- the</p> <p>22 effective information caused by Celebrex news. And</p> <p>23 of course, the number's a constant term.</p> <p>24 One thing I want to make clear is, for the</p> <p>25 -- before I took the -- before I converted the</p>	<p style="text-align: right;">Page 72</p> <p>1 price that removes the effect of Monsanto -- the</p> <p>2 Monsanto holdings.</p> <p>3 And so that was a way of controlling for a</p> <p>4 Monsanto effect or a chemical sector effect, which</p> <p>5 is actually more precise and more direct than</p> <p>6 simply including a chemical index or an agriculture</p> <p>7 index on the right-hand side of the regression.</p> <p>8 So just as we have to remove the market</p> <p>9 factor and the pharmaceutical sector factor, it's</p> <p>10 necessary to remove the chemical sector factor.</p> <p>11 And I did it that way.</p> <p>12 Q. All right. So -- so go ahead.</p> <p>13 A. So then I ran the regression on a year's</p> <p>14 worth of data, starting with when I was first able</p> <p>15 to construct that Pharmacia stock price that</p> <p>16 excludes the Monsanto factor. And that was October</p> <p>17 19th, 2000.</p> <p>18 So I ran the regression where the</p> <p>19 left-hand side is Pharmacia returns, excluding</p> <p>20 Monsanto; and the right-hand side is a constant,</p> <p>21 the market pharmaceutical sector, over a year's</p> <p>22 worth of data -- which is a standard estimation</p> <p>23 period -- October 19th, 2000 through October 18th,</p> <p>24 2001; and the results of that regression can then</p> <p>25 be used -- are presented in Exhibit 8 of my report;</p>
<p style="text-align: right;">Page 71</p> <p>1 Pharmacia stock prices into Pharmacia log normal</p> <p>2 returns, I subtracted the observable value of the</p> <p>3 Monsanto division from the Pharmacia stock price.</p> <p>4 So what I -- the reason for doing that is,</p> <p>5 Monsanto is a chemicals and agriculture company;</p> <p>6 and the eventss in this case are related to</p> <p>7 Celebrex. We want to know what the effect is -- if</p> <p>8 there's an effect of Celebrex news on Pharmacia's</p> <p>9 stock price.</p> <p>10 If we did not remove the Monsanto</p> <p>11 division, then the left-hand side variable, the</p> <p>12 explained variable, the stock price, could be</p> <p>13 buffeted about by chemical sector news, or</p> <p>14 agriculture sector news, or anything related to</p> <p>15 Monsanto which is not Celebrex related.</p> <p>16 So the purest way of doing this event</p> <p>17 study was to remove it. I mean, it was possible,</p> <p>18 in this case, because from October 2000 on,</p> <p>19 Monsanto had a separately-trading stock price. So</p> <p>20 I was able to observe in the marketplace what</p> <p>21 Monsanto stock was worth, multiply that by the</p> <p>22 number of shares that Pharmacia owned, subtract</p> <p>23 that from Pharmacia's market capitalization, and</p> <p>24 then redivide by Pharmacia's number of shares</p> <p>25 outstanding to find -- to get a Pharmacia stock</p>	<p style="text-align: right;">Page 73</p> <p>1 and they can be used to determine what is a typical</p> <p>2 movement for Pharmacia -- excluding Monsanto --</p> <p>3 typical in terms of volatility, and typical in</p> <p>4 terms of reacting to the market and the sector</p> <p>5 factor, so that later, when we observe -- when we</p> <p>6 want to focus on a particular event -- for example,</p> <p>7 February 6th, 2001, or February 7th, or February</p> <p>8 8th, 2001, or the three period -- three days</p> <p>9 combined, we have a standard against which to</p> <p>10 compare them. We have what actually happened over</p> <p>11 those three days. We can compare them to what's</p> <p>12 typical.</p> <p>13 And the way event study logic works is</p> <p>14 that, if the movement -- after excluding all these</p> <p>15 factors, after statistically removing all of these</p> <p>16 other effects, what you have is what's called a</p> <p>17 residual return. If the residual return is so</p> <p>18 extreme, you know, either -- either so high, a high</p> <p>19 return, or so low, such a big negative return that</p> <p>20 it just can't -- it doesn't -- it can't conceivably</p> <p>21 or reasonably have been caused by random</p> <p>22 volatility, the conclusion is that it must have</p> <p>23 been caused by news.</p> <p>24 What kind of news? Well, it can't be</p> <p>25 sector news, 'cause we removed sector news. It</p>

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<p style="text-align: right;">Page 74</p> <p>1 can't be market news, 'cause we removed market 2 news. It can't be chemical sector or Monsanto 3 news, 'cause we removed those effects. 4 It has to be company-specific 5 pharmaceutical news. It's the perfect event study 6 for studying whether information is important for 7 affecting pharma -- the company Pharmacia. And 8 that's what I did. 9 Q. Now, your event study doesn't tell you 10 what -- on that specific day, what specific piece 11 of company-specific information caused that 12 residual change, correct? 13 A. Okay. The process, as I described it up 14 to that point, would allow you to make a conclusion 15 that it was company-specific pharmaceutical news -- 16 Q. Right, but my question -- 17 A. -- that moved the price. And so then an 18 additional piece of analysis is to analyze what 19 news came out. What news reasonably could have 20 caused the price to move, if, in fact, we 21 discovered that the movement is a 22 statistically-significant movement; and so what -- 23 want me to continue? 24 I mean, you don't want me to continue. 25 Q. Well, I want to ask a more specific</p>	<p style="text-align: right;">Page 76</p> <p>1 models -- the way that I did it, and the way that 2 Doctor Lane did it -- specifically can tell you 3 whether there's a day on which the stock price 4 movement was so unusual that we know that company 5 information had to be moving the stock price. But 6 let's -- but then your question was, do you know 7 which information moved it? 8 Q. Correct. 9 A. Right. So there's another step in the 10 analysis. So you have to look -- 11 Q. Well, no. My question was, does the 12 regression analysis itself tell you which piece of 13 information that day caused the stock price 14 movement? 15 A. Right. So the regression analysis is one 16 component of an event study analysis -- it's not 17 the entirety of the event study analysis; the 18 additional component of the event study analysis is 19 to look at the news. And use judgment. And make a 20 -- or evaluation methodologies, and make a 21 determination as to what news that may have come 22 out on -- you know, on or near that day that you're 23 concerned about, in fact, was the news that moved 24 the market. 25 So for example, if the movement is</p>
<p style="text-align: right;">Page 75</p> <p>1 question. Which I think you may have already 2 answered, which is -- 3 A. All right. 4 Q. -- the regression analysis itself doesn't 5 tie a movement on any particular day to one 6 specific piece of company-specific information, 7 among the various pieces that are disclosed that 8 day. 9 Is that -- is that a fair statement? 10 A. Well, actually, as you mention it, I do 11 have to back up. I mean. But -- it's actually 12 interesting that -- that Doctor Lane and I used 13 very similar methodologies and we both used dummy 14 variables for -- to control -- basically, to 15 eliminate from the data a -- the -- to eliminate 16 from the regression estimation the impact of news 17 on events -- on the dates of events that we were 18 concerned about. 19 So -- so the regression actually -- if you 20 include dummy variables, you can read out of the 21 regression, by looking at the significance of the 22 dummy variables, whether a particular day is 23 significant or not. 24 Q. Okay. 25 A. So there is a way that the regression</p>	<p style="text-align: right;">Page 77</p> <p>1 significantly downward, and on a particular day 2 there was two pieces of great news and one piece of 3 bad news, you know that it wasn't the good news 4 that made the stock price go down. So you can 5 focus on the bad news as having been the culprit. 6 Q. Okay. But the regression analysis itself 7 is not going to tell you which piece, out of the 8 three pieces of competing information, caused the 9 stock price movement, right? 10 A. Correct. It's -- additional information 11 analysis has to be conducted. 12 Q. And then you mentioned, you know, the 13 dummy variable. So in your model there's a dummy 14 variable for February the 6th. 15 A. (Witness nods.) 16 Q. And -- and there's one for the 7th and the 17 8th too, but none of those dummy variables tells 18 us, even if it's statistically significant, what, 19 on that day, caused the stock price movement, 20 correct? You need to do additional analysis beyond 21 looking at that dummy variable? 22 A. That's right. And I did that additional 23 analysis. 24 Q. Now, you -- I believe you say in your 25 report that you consider the price reactions on</p>

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<p style="text-align: right;">Page 78</p> <p>1 February 6th, 7th, and 8th, both on individual days 2 and also cumulatively. 3 Is that -- is that a correct statement of 4 what you've doing -- done? 5 A. Yes. 6 Q. And was the stock price change on February 7 the 6th statistically significant? 8 A. Okay. Well, statistically significant 9 means that we can rule out that it was random 10 volatility. 11 Q. Correct. Could you rule out that it was 12 random volatility -- 13 A. Yes. 14 Q. -- that caused this February 6th change? 15 A. Absolutely. Because in the context of the 16 three-day window, on the 6th, 7th, and 8th, we see 17 a statistically significant drop in the adjusted 18 Pharmacia stock price, which means that we know 19 that the movement over those three days -- the 20 residual movement was not caused by random 21 volatility. And that's the definition of 22 statistical significance. 23 Q. Doesn't your own analysis confirm that you 24 are not able to rule out the possibility that the 25 movement on February the 6th was attributable to a</p>	<p style="text-align: right;">Page 80</p> <p>1 modest movement, but it was caused by information. 2 Q. Well, the residual movement on February 3 the 6th was not statistically significant. That's 4 what your analysis shows, correct? 5 A. Not -- if you were to improperly focus on 6 February 6th in isolation -- and it would be 7 improper, given an understanding of the events and 8 how February 6th connected to the 7th and the 8th 9 in terms of what happened on those three days -- if 10 you were to improperly do that, you would be led to 11 the erroneous conclusion that you just described. 12 That's not what I did. 13 I looked at -- at February 6th, in 14 combination with the 7th and the 8th, because I 15 understood, from doing the news and information 16 analysis, that this is a reaction -- this is, 17 essentially, one event -- eliminated random 18 volatility as the reason. I mean, statistical 19 significance of the three-day window return tells 20 you that random volatility is not the causative 21 factor. Therefore, it was information. 22 Q. Well, my question was much simpler: 23 Wasn't the residual decline on February the 6th not 24 statistically significant? 25 MR. SAHAM: Objection. Asked and</p>
<p style="text-align: right;">Page 79</p> <p>1 combination of volatility and market and sector 2 factors? 3 A. No. 4 MR. SAHAM: Objection. Asked and 5 answered. 6 A. Quite the contrary. Quite the contrary. 7 I mean, if one were to improperly examine 8 February 6th in isolation, without understanding 9 the events of 6th, 7th, and 8th, and how they were 10 related events, one might incorrectly arrive at a 11 conclusion that it was just random volatility 12 moving the stock price on February 6th. 13 But the more correct analysis is to look 14 at the news, and understand the facts and 15 circumstances that pertain to this case and pertain 16 to this analysis, and see that these dates have to 17 be examined in combination. And once you do that 18 and run the test, and see that the movement over 19 those three days was statistically significant, we 20 can rule out random volatility. It was not random 21 volatility that was responsible for the residual 22 returns over those three days. 23 And February 6th, being one of those three 24 days, we now know more about it from this analysis. 25 We know that it -- it was a slight movement, a</p>	<p style="text-align: right;">Page 81</p> <p>1 answered. 2 THE WITNESS: So should I answer it again? 3 MR. SAHAM: Yeah. You can answer. 4 A. You might arrive at a conclusion that 5 random volatility was the cause of the movement on 6 February 6th if you improperly looked at February 7 6th in isolation. 8 Q. Right. But that's not my question. I 9 didn't ask about -- 10 A. I think it is your question. 11 Q. -- your conclusion about random 12 volatility. I'm asking you, wasn't the residual 13 decline, as measured by the T stat you calculated 14 in your regression, wasn't that residual decline on 15 February the 6th not statistically significant? 16 Don't you say that in your report? 17 MR. SAHAM: Objection. Asked and 18 answered. 19 A. If you measure it in isolation -- if you 20 measure it in isolation and draw a conclusion about 21 whether it's random volatility or information, by 22 improperly looking at that event and that return in 23 isolation, you'd characterize -- you would 24 characterize it as -- as statistically not 25 significant.</p>

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<p>1 Q. Well, tell me if you agree or disagree 2 with the following statement: "The Pharmacia 3 pharmaceutical stock price declined 75 cents on 4 February the 6th, 2001; the residual decline was 39 5 cents, equivalent to 0.74 percent, which was not 6 statistically significant." 7 MR. SAHAM: Are you reading from 8 something? 9 THE WITNESS: He's reading from the 10 report. 11 MR. WANG: I'm reading from my notes, 12 but -- 13 A. Well, what paragraph was that of mine? 14 Q. That's from my notes, but I just want to 15 know if you agree -- 16 MR. SAHAM: You can read from your notes. 17 I just wasn't sure what you were reading. 18 A. Well, you know, in the context of the 19 entire analysis where -- to be comprehensive -- one 20 might want to look at each individual day in 21 isolation, but understand that that's not the 22 correct way to ascertain whether it's news or 23 volatility moving the stock price, you know, that 24 can be an interim -- an interim -- although not 25 final observation.</p>	<p>1 February -- the first row is February 6. 2 Do you see that? 3 A. Yes. 4 Q. The second-to-last column is 5 "statistically significant." 6 A. Right. 7 Q. What does that column tell you? 8 A. It tells you that if you focused only on 9 that day, you would draw the erroneous conclusion 10 that it may have been random volatility that moved 11 the price on that day. 12 Q. So what does the "No" next to February 6 13 tell you? 14 A. Exactly what I just said. 15 Q. Okay. What does that column tell you 16 generally? Not with respect to February 6th, but 17 what is the information reflected in the column 18 entitled, "Statistically Significant"? 19 What does that column tell you? 20 A. Precisely what I just said in the manner I 21 phrased it. That if you focused only on that day, 22 you would be led to a conclusion that the news on 23 that day was caused -- that the price movement on 24 that day was caused by random volatility. 25 But in this case, given the facts of this</p>
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<p>1 Q. All right. Let's look at -- 2 A. Wait. I'm not done. (Witness reviews 3 document.) And can you repeat the number and the 4 -- and the question? 5 What percentage did you say? 6 Can you just repeat the previous question 7 -- what you read from your notes. 8 Q. I think I'll try to expedite this by 9 referring you to Exhibit 8 with your reported T 10 stats. 11 A. That's what I want to see. Is the number 12 -- is what you just read the same as the T stats 13 here? 14 Q. I hope so. But Exhibit 8 -- let me ask 15 you a question: Exhibit 8 reports here T stats for 16 various variables, including the February 6 dummy? 17 A. That's right. 18 Q. The T stat is negative .381? 19 A. That's right. 20 Q. That's not statistically significant? 21 A. Well, you wouldn't draw a conclusion of 22 statistical significance for the February 6th event 23 if you focused only on that number. But that would 24 be incorrect to focus -- focus only on that number. 25 Q. All right. Let's look at Exhibit No. 9.</p>	<p>1 case, that would be an incorrect procedure and an 2 erroneous conclusion, as it's shown in this very 3 exhibit with the three-day results and the -- 4 coupled with the news analysis that's presented in 5 the report. 6 Q. The T stat of negative .38 has the p-value 7 of .70 in your report; is that correct? 8 A. Yes. 9 Q. And that -- what -- what level of 10 statistical significance did you use in your 11 report? 12 A. I don't know if I predefined it. I mean, 13 I know that we can see that for this -- oh, for 14 that column that says, "Statistically Significant"? 15 5 percent. 5 percent on a -- 16 Q. That's my question. Yes. 17 A. Right. 18 Q. So a 5 percent was your -- was your -- 19 A. Right. 20 Q. Okay. Did you ever look at the 21 statistical significance of February 6th 22 cumulatively with February 7th? 23 A. Yes. 24 Q. And was the February 6th to 7th cumulative 25 residual change statistically significant?</p>

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<p style="text-align: right;">Page 86</p> <p>1 A. Yes.</p> <p>2 Q. How do you calculate the -- a T stat over</p> <p>3 a two-day period?</p> <p>4 A. Sum the residual returns, and divide by</p> <p>5 the square root of 2 -- I'm sorry. That's not</p> <p>6 right.</p> <p>7 THE WITNESS: Can I --</p> <p>8 MR. SAHAM: Well, I mean, you want him to</p> <p>9 write out the formula?</p> <p>10 A. You take the standard error of the</p> <p>11 regression --</p> <p>12 Q. Uh-huh.</p> <p>13 A. -- divided --</p> <p>14 Q. I think you had it right the first time.</p> <p>15 A. No. That's not right. The standard error</p> <p>16 of the regression times the square root of 2, okay,</p> <p>17 that becomes the standard error of the two-day</p> <p>18 residual return.</p> <p>19 Q. Correct.</p> <p>20 A. So you sum the two-day -- two single-day</p> <p>21 residual returns and divide by that standard error</p> <p>22 of the two-day residual term.</p> <p>23 Q. Okay.</p> <p>24 A. That's the T stat.</p> <p>25 Q. All right. But let's do that for February</p>	<p style="text-align: right;">Page 88</p> <p>1 Q. If it will expedite the process, I'll</p> <p>2 represent that I don't believe you report the</p> <p>3 cumulative February 6th/February 7th -- the</p> <p>4 statistical significance of that cumulative</p> <p>5 decline. But you're free to look through your</p> <p>6 report.</p> <p>7 A. All right. So we'll do some arithmetic.</p> <p>8 All right.</p> <p>9 Q. Yeah. That's fine. So I'll -- okay. So</p> <p>10 the residual -- let's just go by --</p> <p>11 MR. SAHAM: Do you need a calculator or</p> <p>12 something? Or what do you need?</p> <p>13 Q. Do you need a calculator for this?</p> <p>14 MR. SAHAM: I'm asking. I don't know.</p> <p>15 Q. Maybe for the division.</p> <p>16 MR. SAHAM: If he's going to do math, I</p> <p>17 mean, you know...</p> <p>18 Q. Why don't I just represent what the</p> <p>19 figures are, and you can contest it later if you</p> <p>20 want.</p> <p>21 So the residual return on February the 6th</p> <p>22 of your constructed dependent variable is negative</p> <p>23 .74 percent.</p> <p>24 Do you see that?</p> <p>25 A. Yes.</p>
<p style="text-align: right;">Page 87</p> <p>1 6th.</p> <p>2 The sum of minus .38 --</p> <p>3 COURT REPORTER: You're going too fast.</p> <p>4 Q. The sum of the T stats of February 6 and</p> <p>5 7 --</p> <p>6 A. Well --</p> <p>7 Q. Is negative 2.154 --</p> <p>8 A. I'd like to look at my rebuttal report</p> <p>9 where I present this.</p> <p>10 Q. Can you answer my question first?</p> <p>11 A. No, I'd rather refer to my report to get</p> <p>12 the -- to refresh myself about these statistics</p> <p>13 that I've already calculated. So let's do that.</p> <p>14 Let me have my results from this very same</p> <p>15 analysis in front of me, and then you can ask me</p> <p>16 questions about those results.</p> <p>17 Q. So you're not able to tell me what the sum</p> <p>18 of negative .38 and negative .216 is --</p> <p>19 MR. SAHAM: I think he wants to look at</p> <p>20 his report, which is fair, so -- and then answer</p> <p>21 your question.</p> <p>22 A. (Witness reviews document.) I know I did</p> <p>23 this before. I just want to -- it will save me</p> <p>24 having to do the arithmetic again.</p> <p>25 (Witness reviews document.)</p>	<p style="text-align: right;">Page 89</p> <p>1 Q. And the residual return of the dependent</p> <p>2 variable is negative 4.17 percent on February 7th.</p> <p>3 A. Yes.</p> <p>4 Q. I'll represent to you that those two</p> <p>5 figures add up to negative 4.91 percent.</p> <p>6 A. Okay.</p> <p>7 Q. Your standard error is 1.93 percent.</p> <p>8 You've got to go back an exhibit, I think.</p> <p>9 A. (Witness reviews document.) Yes.</p> <p>10 Q. And the square root of 2 is the square</p> <p>11 root of 2.</p> <p>12 So the formula is negative 4.91 percent,</p> <p>13 divided by 1.93 percent, times the square root of</p> <p>14 2, correct?</p> <p>15 A. I think I follow you. Sure.</p> <p>16 Q. And I'll -- I'll represent to you that</p> <p>17 comes out to negative 1.25.</p> <p>18 A. Did we do that right? We have --</p> <p>19 MR. SAHAM: If you want a calculator or</p> <p>20 something -- if you want to do it yourself, I think</p> <p>21 you're entitled to if he's asking a question about</p> <p>22 math and you want to, you know, calculate it</p> <p>23 yourself.</p> <p>24 Q. That's fine. You can calculate it</p> <p>25 yourself.</p>

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<p style="text-align: right;">Page 90</p> <p>1 A. I see. All right. So fine. No, that's 2 all right. And you're saying it's less than 2. 3 Q. I'm saying the T stat is negative 1.25, 4 the combined -- strike that. 5 I'm saying the formula -- I'll just say 6 what I just said. 7 The cumulative return logarithmic on those 8 two days is negative 4.91 percent. 9 A. Okay. 10 Q. Okay? The standard error you report as 11 1.93 percent; and the square root of 2 is the 12 square root of 2, as you pointed out; and -- and 13 calculation of the following: Negative 4.91 14 percent, divided by 1.93 percent, times the square 15 root of 2, comes out to negative 1.25. 16 A. Okay. 17 Q. And -- and you're familiar enough with T 18 stats that you recognize that negative 1.25 is not 19 statistically significant at the 5 percent level. 20 A. Again, the way you're using "not 21 statistically significant" is -- is probably too 22 strict a definition. 23 I mean, if statistically significant means 24 that it was -- that we're able to determine that 25 it's not caused by random volatility, well, we have</p>	<p style="text-align: right;">Page 92</p> <p>1 improperly looking at a too-narrow window in order 2 to ascertain the effect of the news that came out 3 over that period. 4 Q. And you actually do your model two 5 different ways, right? 6 You have one with the dependent variable, 7 being the hypothetical pharmaceuticals -- Pharmacia 8 pharmaceutical stock; and then you have one with 9 the actual stock as a dependent variable, and a 10 slightly different set of independent variables; is 11 that correct? 12 A. Well, right. If you don't take out 13 Monsanto from Pharmacia, then you've got to 14 understand that Monsanto -- that Pharmacia is 15 impacted by developments in the chemical sector. 16 And so you would need to have a chemical sector 17 index on the right-hand side to control for those 18 effects, which is something Doctor Lane doesn't do, 19 but I do in my alternative regression analysis. 20 Q. And under that alternative specification, 21 are you aware that the cumulative February 22 6th/February 7th change also was not statistically 23 significant? 24 A. Again, I mean, if you mean statistically 25 significant, as, you know, would you draw a</p>
<p style="text-align: right;">Page 91</p> <p>1 been able to ascertain that that second day, and in 2 fact, the first day are not caused by random 3 volatility. But strictly from -- from the numbers, 4 you know, restricting the analysis -- and I believe 5 inappropriately to -- to not look at the three-day 6 window -- one might erroneously draw that 7 conclusion, right. 8 Q. So what do you mean by statistical 9 significance -- sorry. Strike that. 10 What do you mean by statistically 11 significant, as you have it here in Exhibit 9? 12 A. Well, in Exhibit 9 this is the more 13 numerical, is it above or below the threshold 14 calculation? 15 But the implication as to whether or not 16 it's caused by random volatility or not is not 17 what's in that column there. 18 Q. So if you were going to add a row here for 19 cumulative February 6th, February 7th, and you can 20 assume that my calculation was correct, would you 21 put "No" or "Yes" under "Statistically 22 Significant"? 23 A. To be consistent with these other numbers, 24 then it would be no. But again, that -- you know, 25 with the understanding that that's just, again,</p>	<p style="text-align: right;">Page 93</p> <p>1 conclusion that it was not -- that it was caused by 2 random volatility, I'd have to say that I would 3 draw a conclusion that it was not random volatility 4 that moved the stock price over those two days. 5 But simply looking at the numbers, 6 incorrectly confining the analysis to a too-narrow 7 window, one might draw that conclusion. One might 8 characterize it with those words. 9 Q. So if the -- the Court or the jury were to 10 conclude that a two-day event window were the 11 appropriate event window here, then your analysis 12 shows that, you can't rule out the possibility the 13 stock movement is attributable to random volatility 14 and market or sector factors, correct? 15 MR. SAHAM: Objection to form. Calls for 16 a legal conclusion. Incomplete hypothetical. 17 A. I think what you're saying is that -- I'm 18 not entirely sure what you're saying. 19 You're saying that, if it were determined 20 that the correct quantitative method for analyzing 21 whether or not Pharmacia -- Pharmacia's stock price 22 over these days was -- was moved by 23 company-specific information, or alternatively, 24 random volatility, if it were determined that the 25 correct quantitative method was to use only a</p>

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<p style="text-align: right;">Page 94</p> <p>1 two-day window, what would then -- what would you 2 then be forced to conclude, or what would you be 3 constrained to conclude in terms of the statistical 4 significance of those two days? 5 That's what you're saying? 6 Q. Correct. 7 A. Well, I -- I just want to preface all this 8 by saying that, you know, the two days is not the 9 correct window; and anybody who looks at the news 10 and understands how this news evolved over these 11 two days would understand that -- that it's 12 inappropriate to look at only the two-day window, 13 without looking at either February 7th 14 individually, or the three-day window collectively; 15 that would be -- that would be a mistake to only 16 look at 6 and 7 collectively, and not look at the 17 7th individually or 6th, 7th, and 8th collectively. 18 But if they were forced to do that for 19 some unusual reason, they would be led to the wrong 20 conclusion that it may have been random volatility 21 that moved the stock price only, and not company 22 information. 23 Q. And -- 24 A. And you know, it's just so hard to believe 25 that anybody would draw that conclusion, knowing</p>	<p style="text-align: right;">Page 96</p> <p>1 of the information that was being processed by the 2 market over these days and what the stock price 3 did, how it behaved, that -- that nothing's going 4 on; that this -- that this was just a random 5 fluctuation. I mean, people lost, you know, 9 6 percent of their investment. You know, people that 7 invested in Pharmacia. They -- I think it's down 8 \$6 a share, and to say that this was just a random 9 fluctuation I think is an incorrect conclusion. 10 Whether you want to characterize it as crazy or 11 unreasonable is up to you, but I would say it's 12 patently incorrect. 13 Q. Well, I think you said that -- well, let 14 me just ask you: Would it be unreasonable, in your 15 view, for the Court or the jury or whoever makes 16 the determination, to decide that February 6th or 17 7th, that that two-day time period was the proper 18 event window to look at? 19 MR. SAHAM: Same objections. 20 A. I think it would be wrong. 21 Q. Do you have any opinion on whether it 22 would be reasonable or not? 23 A. I'm -- how you are you defining 24 "reasonable"? 25 Q. How do you define "reasonable"?</p>
<p style="text-align: right;">Page 95</p> <p>1 how important these dates were, and why these dates 2 -- and how important these events were to the 3 company; and why these dates were chosen in the 4 first place. 5 Q. So you're saying that the jury or the 6 judge would be acting unreasonably if he or she 7 made that determination? 8 A. They would -- 9 MR. SAHAM: Objection. Objection to form. 10 Calls for speculation. Incomplete hypothetical. 11 Q. Let me ask it differently: Would anyone 12 drawing that conclusion be crazy? 13 A. Crazy? 14 MR. SAHAM: Same -- same objection. 15 A. Look, February 7th individually is clearly 16 statistically significant. So we know that on 17 February 7th the stock price was moving not for 18 random volatility reasons, but because of 19 information. 20 So even if you were forced to look at only 21 the 6th and the 7th individually -- the 6th and the 22 7th within that window, you can see that, on 23 February 7th, it had to have been information that 24 moved the stock price. So I just don't think 25 anybody can reasonably conclude, given the nature</p>	<p style="text-align: right;">Page 97</p> <p>1 A. Many -- many different ways, depending on 2 the context. 3 Q. Well, however you want to define it, go 4 ahead and define it. 5 A. Well, reasoned -- 6 Q. And then -- and then tell me what your 7 answer is. 8 A. Supported by reason. Well, if it's only 9 supported by reasoning, and not supported by 10 empirical analysis, I suppose I couldn't say it's 11 unreliable. But if it's -- but if by "reasonable" 12 you mean that it's -- that reason requires the 13 correct tools be applied to the analysis, then it 14 would have been unreasonable to -- to draw that 15 conclusion, because the correct empirical analysis 16 says that information about Celebrex caused the 17 stock price to move on those days. 18 VIDEO OPERATOR: There are five minutes 19 remaining on the videotape. 20 MR. WANG: Okay. Why don't we switch now. 21 VIDEO OPERATOR: The time is 11:17. This 22 is the end of Tape No. 1. We are now off the 23 record. 24 (Recess was taken.) 25 VIDEO OPERATOR: The time is 11:30. This</p>

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<p style="text-align: right;">Page 98</p> <p>1 is the beginning of Tape is No. 2. We are now back 2 on the record. 3 Q. In your report you chose to look at a 4 three-day event window, correct? 5 A. That's right. 6 Q. And did you settle on the three-day event 7 window prior to comparing it with alternatives, 8 such as a one-day or two-day event window? 9 A. The facts dictate a three-day window. I 10 examined the facts, and I agreed that a three-day 11 window -- or concluded that a three-day window was 12 appropriate. 13 Q. Prior to so concluding, were you aware 14 that there was no statistical significance looked 15 at either a one-day or two-day event window? 16 A. Well, I don't agree with the premise. I 17 -- I know that the second day is statistically 18 significant -- February 7th. 19 Q. Were you aware, prior to deciding to use a 20 three-day event window, of the statistical 21 significance of either February 6th and February 22 7th? 23 A. Well, I mean, I think I was aware that 24 there was a large movement on the 7th. I do not -- 25 I don't recall that I had run the test. I don't</p>	<p style="text-align: right;">Page 100</p> <p>1 were large movements on the 7th, and the 8th, and a 2 moderate movement on the 6th, I can't recall. But 3 I know that wasn't the basis for my determination 4 that the three-day window was the correct window. 5 Q. Isn't it true that the three-day window is 6 the shortest window you can use and still find 7 cumulative statistical significance? 8 MR. SAHAM: Objection to form. Asked and 9 answered. 10 A. No. Again, if -- if we have a narrow and 11 a broad definition of statistical significance. I 12 mean, statistical significance is a 13 characterization from the data which is used to 14 determine whether or not the information was caused 15 by random volatility or -- or information. 16 I believe the information on -- on 17 February 6th and February 7th were caused by 18 information; and I believe that's supported by the 19 data -- confirmed -- proved by the data. So if 20 we're using, you know, that definition, I'd have to 21 clearly disagree with you. 22 If you want to look at a -- the more 23 narrow definition, you know, just simply looking at 24 the numbers, without any interpretation or 25 understanding of what those numbers mean, I could</p>
<p style="text-align: right;">Page 99</p> <p>1 think I had. 2 But just based on my experience, seeing a 3 large movement like that would suggest that it was 4 either clearly significant or close. 5 Q. And you say, as you sit here today, that 6 you are not aware that February 6th and February 7 7th, looked at cumulatively, would not be 8 statistically significant prior to deciding to use 9 the three-day event window? 10 MR. SAHAM: Objection to form. 11 A. No I need to hear the words again. 12 THE WITNESS: Could I hear just the exact 13 words he chose. 14 (Question read back.) 15 A. It's hard to remember what I was aware of. 16 But I can tell you that from the completion of my 17 information analysis -- and when I get one of these 18 cases, one of the first things I do is read 19 everything I can about the facts, including all the 20 analyst reports, and the news, and so forth -- and 21 in this case there's a court opinion as well -- I 22 can tell you that, at the conclusion of the 23 information and news analysis, I was convinced that 24 the three-day window was the appropriate window. 25 If, along the way, I observed that there</p>	<p style="text-align: right;">Page 101</p> <p>1 see that one might get the wrong idea about what 2 happened on February 6th and February 7th if they 3 only looked at a two-day window or just a one-day 4 window. 5 Q. And what idea would you get about what 6 happened on February 6th and 7th if you have -- 7 well start over. 8 What idea would you get about what 9 happened on February 6th and 7th if you looked just 10 at a two-day window or a one-day window? 11 MR. SAHAM: Objection. Calls for 12 speculation. 13 A. Well, any time you look at February 7th, 14 you're going to have to conclude that something 15 important was happening to this company; that there 16 was some new material information that the stock 17 price was reacting to. 18 But -- so if you're looking at the 6th and 19 the 7th, depending on how you look at the 6th and 20 the 7th, you may get the right idea; you may get 21 the wrong idea. But if you look just at the 6th, 22 and constrain yourself to the 6th, and pretend that 23 this information had no -- that the -- and pretend 24 that there was an event that occurred on the 6th 25 that was isolated from subsequent days, and that</p>

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<p style="text-align: right;">Page 102</p> <p>1 the market had no reaction to that information on 2 subsequent days, then you might get the wrong 3 impression that what happened on the 6th was not 4 such an important event and not -- and that -- and 5 that it was just a random fluctuation on the 6th; 6 and that would be incorrect. 7 Q. How did you decide on three, as opposed to 8 one, or two, or five, or any other number? 9 A. Oh, I looked at the news. And if you -- 10 if you -- if you go through the news, it's obvious 11 that it has to be a three-day window. I mean, I 12 guess one can make the argument for -- for longer 13 windows, but -- but three makes the most sense. 14 I mean, you and I discussed this morning 15 that there was important curative -- 16 informationally-curative data that was made 17 available to the market on the 6th. So clearly, 18 we've got to include the 6th. 19 But we also have to understand that that 20 data was confounded by company statements made on 21 the 6th in two different forums. We also have to 22 understand that the information and data that was 23 presented on the 6th ran contrary to market beliefs 24 and -- that had been formulated over the course of 25 a year in which Defendants were making</p>	<p style="text-align: right;">Page 104</p> <p>1 Q. Now, in your academic work, do you always 2 use a three-day window? 3 A. Well, you -- judgment has to be applied so 4 that the -- the choice of window has to be 5 consistent with the facts and circumstances of the 6 case. 7 Some facts and circumstances dictate very 8 short windows. Facts and circumstances in this 9 case dictate a three-day window. 10 Q. And you mentioned in your prior answer 11 that there was confounding information that came 12 out contemporaneous or after -- after the February 13 6th corrective disclosure. 14 Isn't it true that there were other 15 confounding events on February the 7th and 8th as 16 well? 17 A. I looked at those. I describe that I look 18 -- I looked at them, and examined them, and 19 analyzed them. 20 I mean, the confounding information on the 21 6th explains why it took more time -- as part of 22 the explanation as to why it took more time for the 23 market to digest the core information, the 24 informationally-curative disclosure. 25 The other events that I describe have to</p>
<p style="text-align: right;">Page 103</p> <p>1 misrepresentations and false and misleading 2 statements. 3 So you have to understand that the nature 4 of the information that was made available to the 5 market on the 6th was precisely the kind of 6 information that the academic literature says takes 7 generally longer than one day to incorporate into a 8 security price. 9 So now it's absolutely motivated that 10 we've got to go to at least the 7th. On the 7th, 11 we've got discussion of the data, which 12 facilitates, and frankly, speeds up the process of 13 the market understanding what's salient, what's not 14 salient, what the truth is. 15 The 8th is where we see a continuation of 16 market commentary, explaining to investors what had 17 just taken place. There's -- there's an analyst 18 report, "CLASS Flunked Out," which, you know, the 19 title of it says a lot; that what had previously 20 been thought to be a successful study turned out 21 not to be a successful study. 22 So clearly, those three days have to be 23 included when one is measuring and analyzing the 24 market's reaction to this data that was presented 25 on the 6th.</p>	<p style="text-align: right;">Page 105</p> <p>1 be examined in order to see if maybe they were 2 partly responsible for price movements, but -- 3 Q. Well -- 4 A. -- you know what the -- my analysis is. 5 It's in the report. 6 Q. On February 6th, there is very little 7 reaction in Pharmacia stock price, correct? 8 MR. SAHAM: Objection to form. 9 A. We already looked at the reaction. There 10 was a reaction. 11 Q. There's a small reaction, one that was 12 statistically insignificant. 13 A. Well, I don't -- I mean, it's a dollar, 14 right? We already looked at that. It's a dollar. 15 I mean, I'm sure you and I, if we both invested in 16 a stock, would hate to see it fall a dollar; and we 17 have -- and even if it fell just one dollar, we 18 might be asking ourselves, What happened? Was this 19 just a random fluctuation, or did the stock price 20 react to information? 21 And doing the full analysis here, you 22 would determined that it reacted from information; 23 and I think it would be reasonable for someone to 24 be upset if they found out that the -- that the 25 reason they lost a dollar was because there was</p>

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<p style="text-align: right;">Page 106</p> <p>1 information that they could have been informed 2 about previously, but it was concealed. 3 So you know, I wouldn't -- I don't dismiss 4 that as being immaterial or -- or irrelevant. 5 Q. Well, the majority of the drop between 6 February the 6th and February the 8th occurred on 7 February the 8th -- 8th; isn't that correct? 8 A. Well, are you looking at the raw stock 9 price, the stock price corrected for Monsanto, the 10 logarithmic returns, the percent price changes, or 11 the residual returns? 12 Q. I think the answer is the same for them 13 all, but we can go through them in order if you 14 want. 15 A. All right. Well, let's look at the 16 exhibit that describes it. (Witness reviews 17 document.) 18 I'm looking at Exhibit 12 -- 19 Q. Okay. 20 A. -- or wait a minute. 21 MR. SAHAM: Is it 9? 22 THE WITNESS: Yeah. It's 9. 23 Q. Depends which model you want to look at, 24 but... 25 A. (Witness reviews document.) Yeah, it is.</p>	<p style="text-align: right;">Page 108</p> <p>1 price adjustments for publicly-traded stocks? 2 A. Yes, I agree with that. 3 Q. And Patell and Wolfson report that most of 4 the price reaction after earnings and dividend 5 releases occurs very quickly; isn't that correct? 6 A. Right. So part of their paper describes 7 their empirical findings for earnings and 8 dividends, which is probably the most regular and 9 -- and commonly-analyzed type of information 10 available. 11 So it makes sense that the most regular, 12 most common type of announcements would be the kind 13 that the market could absorb most quickly. 14 Q. And they found that major price movements 15 typically dissipated within 60 to 90 minutes? 16 A. Oh, no. No. No. They did not find that 17 it took place for all information. Just 18 specifically dividends and earnings announcements. 19 And then they go on to say that, if it's more 20 complex information, they would expect it to take 21 longer. 22 Q. And what they say is that, for what they 23 looked at, the major price movement dissipated 24 within 60 to 90 minutes, but the effect on the 25 stock price from earnings announcements may</p>
<p style="text-align: right;">Page 107</p> <p>1 It is. There's -- I mean, it's not the entirety of 2 it, but there's more on the 8th than on the prior 3 days of -- of drop. 4 Q. Is there any support at all in the 5 academic literature for there being a delayed 6 reaction -- such as this -- in an efficient market? 7 A. Absolutely. I mean, by "delayed 8 reaction," you mean that the market took an 9 appropriate amount of time, given the nature of the 10 information, to comprehend the information and -- 11 and impact the stock price with that information? 12 Yeah, plenty of data. 13 In fact, I give a -- I give a lot of 14 examples of it in my report. Many, many event 15 studies have windows that are substantially longer 16 even than three days, depending on the kind of 17 information that they are focused on. 18 Patell and Wolfson that Doctor Lane cites 19 talk about how, if it's complex information or 20 irregularly-scheduled information, the reaction 21 time could take longer than simpler information and 22 more regular type of disclosures. 23 Q. Now, you mentioned Patell and Wolfson. 24 Would you agree that that study is often cited as 25 an authoritative examination of the normal speed of</p>	<p style="text-align: right;">Page 109</p> <p>1 continue into the following day. 2 Is that -- is that your understanding of 3 what they found? 4 A. Yeah, but let's -- let's not hide that 5 little phrase within your question, "for what they 6 looked at," which was earnings and dividends. 7 If they had done their study on 8 announcements of the type in -- at issue in this 9 case, or if they had examined this case, they would 10 have observed a much more protracted reaction to 11 the information. 12 Q. Did Patell and Wolfson say their analysis 13 was limited to earnings and dividends releases? 14 A. Do you have a copy of the paper? 15 Q. Yeah. Sure. 16 A. Let's have a look. 17 MR. WANG: Do you know if this has been 18 previously marked? 19 MR. SAHAM: I don't think it has. 20 MR. WANG: So we'll mark it as Exhibit No. 21 1000. 22 MR. SAHAM: Or did you mark one before? 23 MR. WANG: Not me. I did not. 24 MR. SAHAM: It was that Bloomberg, I 25 guess.</p>

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<p>1 MR. WANG: I actually never marked that 2 either. 3 MR. SAHAM: Okay. 4 (Feinstein 1000, Patell and 5 Wolfson paper.) 6 A. (Witness reviews document.) So should I 7 answer now? 8 Q. Yes. 9 A. Their empirical results are, in fact, 10 limited to earnings and dividends announcements. 11 Q. Do they say -- believe that their findings 12 are limited to that narrow circumstance and not 13 applicable in broader circumstances? 14 A. Now, for that we'd have to read through 15 the entire paper again. They say right up front in 16 the first sentence of the abstract that the 17 empirical results are about earnings and dividend 18 announcements. And as I cite it in my report, they 19 do draw generalizations to other kinds of 20 announcements, but the generalizations they draw 21 are supportive of longer windows, where they say 22 that, for smaller companies, less regular 23 announcements, more complex information, the speed 24 of reaction would be slower. 25 They -- they anticipate it would be</p>	<p>1 empirical studies of -- you know, that -- that show 2 that, in some circumstances, given certain types of 3 information, some reactions don't occur all at 4 once; that sometimes the market does need time to 5 digest complex and voluminous disclosures. 6 Q. Can you cite anything now that supports a 7 delayed reaction? 8 A. Yeah. Yeah. I mean, we'd have to go 9 through each of the studies, but -- (witness 10 reviews document.) 11 THE WITNESS: Can I have the rebuttal 12 report? 13 MR. SAHAM: It's right here (indicating). 14 A. (Witness reviews document.) 15 THE WITNESS: That's not what I'm looking 16 at. I'm looking for this. (Witness reviews 17 document.) 18 A. I mean, the fact that -- and I'm looking 19 at Paragraph 173 of my original report. 20 I mean, the fact that there is a large 21 body of empirical research where analysts choose to 22 look at event windows of five days or longer 23 implicitly acknowledges that the profession 24 understands that some reactions don't take place 25 all at once.</p>
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<p>1 slower. 2 Q. Did they discuss at all the possibility of 3 price not reacting at all for two days? 4 A. Well, I don't -- I don't recall that they 5 did. And I'm sure they also didn't specifically 6 address a case where an announcement was a 7 correction of false and misleading statements that 8 had been in the market for over 10 months either. 9 Q. Are you aware of any studies that conclude 10 that, in an efficient market, the stock price would 11 be expected to display no reaction when material 12 information is revealed, but then react two days 13 later -- two days later? 14 A. Well, again, I mean, just to -- I mean, I 15 could answer your question the way it was phrased, 16 but I just don't want, you know, to be taken out of 17 context. I mean, I'm not agreeing that in this 18 case there was no reaction for two days. 19 There was a significant reaction on 20 February 7th. And there was a stock drop on 21 February 6th. And when you look at the three days 22 collectively, they're statistically significant. 23 So when -- you have evidence of what really did 24 happen. 25 But as I sit here now, I am sure there are</p>	<p>1 The fact that Doctor Lane himself chose to 2 use three-day windows when he tried to control for 3 confounding information in his own regression 4 implicitly acknowledges that he understands that 5 reactions oftentimes take longer than one day. 6 The fact that in his own empirical -- his 7 own published work he's used windows that were 8 multiple days implicitly acknowledges that it's the 9 generally-accepted principle in the profession that 10 not all information is -- is captured by the market 11 instantaneously. 12 Delayed reactions happen. 13 Q. Are you able to cite one study that finds, 14 in analyzing whatever it was analyzing, that, in an 15 efficient market, the smallest reaction was on the 16 first day, and the largest reaction would be two 17 days later? 18 MR. SAHAM: Objection. Asked and 19 answered. 20 A. Well, I didn't see -- I didn't -- I 21 wouldn't characterize -- I mean, given -- given the 22 nature of the results that I observed in my 23 empirical study, it wasn't necessary to cite 24 exactly those specific types of studies in my 25 report.</p>

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<p style="text-align: right;">Page 114</p> <p>1 So as I sit here today, I don't have, you 2 know, titles of articles at my fingertips about 3 that. 4 I mean, what I do -- what I did put in my 5 report are numerous references to articles that 6 acknowledge -- in the academic literature -- that 7 multiple-day windows are appropriate, given certain 8 kinds of information consistent with the kind of 9 information at issue in this case -- and because 10 reactions to this kind of information often are 11 protracted. 12 I mean, if I thought I needed a reference 13 to an article of that type 'cause I thought that's 14 the way to characterize the result, I probably 15 would have put it in. And I'm sure we can find 16 something in the literature of examples of 17 reactions of that type. 18 But I think I clearly demonstrated that 19 the methodology I applied and the fact pattern that 20 I observed in this case is consistent with what's 21 observed in the literature. 22 Q. Isn't it fair to say that, in an efficient 23 market, investors shouldn't be able to 24 systematically make a profit by being quicker than 25 others to react to information?</p>	<p style="text-align: right;">Page 116</p> <p>1 And sometimes information is just too 2 voluminous and complex for them to get it right 3 within a day -- even in an efficient market. 4 Q. But if it's possible, it will get done 5 within a day in an efficient market, correct? 6 A. Well, I don't know what you mean by "if 7 it's possible." 8 I mean, if it's theoretically possible -- 9 I mean, I -- I think the best characterization is 10 to say that some information takes people longer; 11 some information even takes the best people longer 12 than one day. 13 Q. But however quickly the information could 14 be digested, it will be in an efficient market. 15 That's the definition, correct? 16 A. You have to say that again and maybe a 17 little slower. 18 Q. Sure. I can repeat it. However quickly 19 the information can be digested is how quickly that 20 information, will, in fact, be digested in an 21 efficient market. 22 A. Well, recall also that -- 23 Q. Well, can you say if you agree with that 24 statement or not? 25 A. Well, I'm answering your question.</p>
<p style="text-align: right;">Page 115</p> <p>1 A. I don't think I would phrase it exactly 2 what you said. I mean, I -- even in an efficient 3 market, there are people who make profits, yes. 4 Q. So you believe that, in an efficient 5 market, investors can be able to systematically 6 make a profit by being quicker than others to react 7 to information that's disclosed? 8 A. They're the people who make the market 9 efficient. I mean, people who are very quick to 10 process the information and process it faster than 11 other people earn rents on that ability. 12 Q. And in an efficient market, you have a 13 bunch of people who are trying to make money, 14 correct? 15 A. That's right. 16 Q. So it's in their incentive, and they do 17 try to process information as quickly as possible. 18 A. They try, but no one says that they're 19 super-human and can do it all the time. 20 Q. But they do their best. 21 A. Well, yeah. I would say they do. That's 22 what they're paid for -- doing their best to try to 23 process the information. And they'll be -- they'll 24 -- and sometimes they get it right, and sometimes 25 they get it wrong.</p>	<p style="text-align: right;">Page 117</p> <p>1 (Witness reviews document.) Page 54 of my rebuttal 2 report states -- in an excerpt from a textbook 3 written by Steve Bodie and Robert Merten, two 4 thought leaders in the field of finance; Merten won 5 the Nobel Prize in economics -- that explain that 6 the market price is going to be an amalgam of 7 analysts and investors' opinions about a valuation. 8 So you know, the very first -- the fact 9 that there might be one trader who's extremely fast 10 and able to figure out -- you know, able to process 11 data faster than everybody else doesn't necessarily 12 mean the market is going to adjust to the 13 equilibrium price as fast as that fastest trader. 14 And the quote says, "To see how the 15 current market price of the stock is determined, we 16 look at the aggregation of all analysts estimates 17 and assume that, on average, the market is an 18 equilibrium, i.e., on average, the price will be 19 such that the total desired demand equals total 20 supply. Hence, the market price of the stock will 21 reflect a weighted average of the opinions of all 22 analysts." 23 So that says that -- for very complex 24 information, the market might not be as fast as the 25 fastest trader.</p>

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<p style="text-align: right;">Page 118</p> <p>1 Q. So you think in an efficient market the 2 market price might not react as fast as the 3 quickest trader to understand the information. 4 A. Well, I think the market price will react 5 to that quickest trader's trades, depends -- and 6 maybe to a large extent, if that quickest trader is 7 trading in size, but it doesn't mean that the 8 entire market's reaction is going to take place 9 with that first trader's trade. 10 It could take -- now, I want to be clear 11 here. I'm not saying that there's an understanding 12 in the market that doesn't get into the -- into the 13 price. 14 I want to say that the market's 15 understanding takes time to arrive at the correct 16 understanding. And as the market's understanding 17 takes time to correct -- to arrive at the 18 equilibrium or correct valuation of the security, 19 that's how long it will take for the price to fully 20 react. 21 So you know, if -- if the first trader 22 gets there first, that first trader will probably 23 make some profit and will probably move the stock 24 price some amount. 25 But if it takes everybody else longer to</p>	<p style="text-align: right;">Page 120</p> <p>1 information that has now been disclosed is 2 different from the information that had been 3 previously disclosed. 4 If all the information that was previously 5 concealed is now disclosed, well, then, that's -- 6 that's observable. That's measurable. That's -- 7 and by comparing the information set at a previous 8 time to the information set at a current time, you 9 can see that there's been a change in the 10 information set. 11 Q. My question was, how do you know when the 12 market has absorbed the information? 13 A. Uhm. I see. Well, that's what event 14 studies are for. 15 So you run an event study, identifying 16 what you believe the appropriate time frame is for 17 the information to be incorporated into the market 18 based on the nature of the information; and if the 19 stock price movement over that window is atypical, 20 so atypical that it cannot have been caused by 21 random volatility, after controlling for market and 22 sector effects, you would conclude that -- that it 23 was that information that moved the -- moved the 24 market -- moved the price. 25 Q. And how about relative to how long it</p>
<p style="text-align: right;">Page 119</p> <p>1 arrive at the correct understanding because the 2 information is just so difficult to -- to 3 comprehend and because they may be startled at how 4 different it is from what they had previously been 5 led to believe, then it's just reasonable that 6 these other investors are going to take longer -- 7 maybe they're being prudent in checking their math, 8 and checking their numbers, and checking their 9 calculations, and checking their sources. 10 It doesn't have to take place all at once. 11 I mean, you know, time -- and -- you know, all the 12 academic -- I mean, all these academic studies -- 13 the theoretical work, as well as the empirical 14 work -- acknowledges that efficient doesn't mean 15 instantaneous. We're talking about a marketplace 16 populated by human beings. 17 Q. So -- 18 A. And human beings take time to process 19 information. 20 Q. How do you know in an efficient market 21 then when information has been fully disclosed if 22 you have to wait for, you know, the slower people 23 to digest information? 24 A. Well, you know it's been fully disclosed 25 when you can -- you can observe that the</p>	<p style="text-align: right;">Page 121</p> <p>1 takes analysts to digest information? Is the -- is 2 the information fully absorbed into the stock price 3 after the second analyst understands everything? 4 After the third? The fourth? 5 How do you determine? 6 MR. SAHAM: Objection to form. 7 A. Well, you can measure it empirically. I 8 mean, you can measure it empirically. But if you 9 see analysts continuing to write reports, and you 10 know that analysts are a means by which the market 11 becomes efficient, then you've got to take that 12 into account in measuring or in determining how 13 long it would take. 14 I mean, in the Apollo case, for example -- 15 you mentioned earlier -- it took an analyst six 16 days to consider the information that had been 17 disclosed and write a report explaining to the 18 marketplace that there was a factor that had been 19 overlooked. 20 So in that case, it took six days. 21 Q. Now, you've mentioned a few times now that 22 other people have used different event window 23 lengths in different cases or have used multiple -- 24 multiple-day event windows in different cases. 25 Now, here there's no issue with</p>

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<p>1 preannouncement leakage; is there -- leakage of 2 information prior to February 6 in particular? 3 A. I didn't see any. I didn't see any 4 evidence of that. I know that Doctor Lane dummies 5 out the day before every event. So maybe he has 6 some information or belief that there's leakage. 7 But I -- I personally didn't see any evidence of 8 leakage. 9 Q. And that's one reason to use a 10 multiple-day event window, correct, to account for 11 the possibility of preannouncement leakage? 12 A. You would. If you thought there was going 13 to be leakage, you might want to consider analyzing 14 -- extending the window to include time prior to 15 the public announcement, that's right. 16 Q. And not just if you thought there would 17 be. If you thought there could be, you might want 18 to do the same, correct, to rule out that 19 possibility? 20 A. Oh, I think. 21 Q. Only -- only if you knew for sure you 22 would do it. 23 A. Oh, I think it depends on the facts and 24 circumstance of the case -- how confident you were 25 that that was necessary.</p>	<p>1 you would have known earlier that the study didn't 2 show significantly -- well, you would have known 3 that -- earlier that Celebrex did not demonstrate 4 statistical superiority to NSAIDs with regards to 5 the primary safety end point. You would have known 6 that earlier, 'cause that's something the company 7 said from the outset. 8 There's additional information -- which 9 we've gone over and is in Paragraph 45 of my report 10 -- that the market did not know, but I can imagine 11 an investor reading this, thinking, well, Bloomberg 12 is just reporting what I already know. Maybe 13 that's what they mean when they say that they might 14 -- you know, the company might have trouble going 15 into the review meeting. 16 Q. So the market already -- 17 A. In fact, I don't see a full disclosure of 18 the -- of the -- of what I have in Paragraph 45 in 19 this article. 20 Q. So the market -- the market already knew 21 -- I mean, you skipped to the Paragraph No. 4, but 22 are you saying the market already knew what was 23 disclosed in the very first paragraph, the very 24 first sentence of this news report? 25 Specifically, that, "Celebrex isn't</p>
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<p>1 Q. And he oftentimes -- strike that. 2 And oftentimes a multiple-day event window 3 is used because of uncertainty as to the date or 4 time that a disclosure was publicized, correct? 5 A. That -- that could be another reason, 6 sure. 7 Q. And here we know that the news was 8 disclosed sufficiently in advance of 10 a.m. on 9 February 6th for Bloomberg to have already 10 published a short piece on it, correct? 11 A. Oh, I thought we were going to look at 12 that. 13 Q. Yeah. I'll give it to you right now. 14 MR. WANG: And this will be Exhibit No. 15 1001. 16 (Feinstein 1001, Bloomberg report, 17 2/6/2001.) 18 A. (Witness reviews document.) And your 19 point is -- or your question is? 20 (Question read back.) 21 A. Well, I see some problems in this 22 Bloomberg article. And just imagine that you were 23 an investor and analyst who had been following 24 Pharmacia and listening to what the company had 25 been saying about Celebrex and CLASS study, well,</p>	<p>1 significantly less likely to cause stomach problems 2 from older cheaper painkillers"? 3 A. Well, I wouldn't know from reading this -- 4 unless I had dug through the posting on the FDA Web 5 site -- which stomach problems they were referring 6 to and whether this is the corrected CLASS results, 7 or the full CLASS results, or the misleading CLASS 8 results that the company had been espousing since 9 the first day of the class period. 10 Q. So you're saying -- 11 A. So I wouldn't know if this was a 12 corrective disclosure or not. 13 Q. So it was already known to the market 14 what's stated here in Paragraph 1; is that correct? 15 MR. SAHAM: Objection. Misstates prior 16 testimony. 17 A. No, it says here "Pharmacia Corporation 18 Celebrex painkiller isn't significantly less likely 19 to cause stomach problems." Well, we know that 20 there is -- that -- what we do know is that, on the 21 primary end point -- even taking out aspirin -- the 22 company had been saying that, on the primary end 23 point, taking out aspirin, that there was a 24 significant advantage. The company had said that. 25 The truth of the matter is that, over the</p>

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<p style="text-align: right;">Page 126</p> <p>1 12-month -- over the full class period, that 2 significant advantage disappears. 3 So if I had only known what the company 4 had been espousing earlier, I don't think I would 5 have known that this first paragraph corrected -- 6 corrected my understanding -- I mean, corrected -- 7 corrected the prior misrepresentations. 8 I wouldn't know which stomach problems 9 Bloomberg was talking about. 10 Q. But the conclusion -- the conclusion 11 reported in the first sentence was not new 12 information to the market on February the 6th; is 13 that your testimony? 14 MR. SAHAM: Asked and answered. Misstates 15 prior testimony. 16 A. It's not fully corrective. That paragraph 17 is not fully corrective of the prior 18 misrepresentations and misleading statements. 19 Q. Was the information relayed in this 20 paragraph known to the market prior to February 21 6th? 22 A. Well -- 23 MR. SAHAM: Same objection. 24 A. Some investors might think -- might have 25 thought it was, because they might have thought</p>	<p style="text-align: right;">Page 128</p> <p>1 it turns out that, even on that particular claim, 2 the result wasn't true when you looked at the 3 12-month data. I mean, information is absorbed 4 differently when it is contrary to a person's prior 5 understanding. 6 I mean, if something is confirmatory, it's 7 absorbed more quickly. If something is 180-degree 8 reversal of what they were previously led to 9 believe, reasonably, we're all going to take longer 10 to accept it. 11 Q. Did you do any empirical analysis to 12 determine the proper event window length here? 13 A. Well, by "empirical analysis," if you mean 14 the news and information analysis, yes. 15 Q. Did you look to see how quickly Pharmacia 16 stock price reacted to prior and subsequent 17 disclosures that were material? 18 A. I didn't see any disclosures that were of 19 the same type as the disclosure that was made 20 February 6th, 7th, and 8th. So that would have 21 been apples and oranges. I mean, that wouldn't 22 have been appropriate. 23 Q. Appropriate or not, did you do so? 24 A. You know, do a historical study on 25 Pharmacia's speed of reaction to information?</p>
<p style="text-align: right;">Page 127</p> <p>1 Bloomberg was referring to what they had already 2 been told. Other investors might have thought 3 there was something new there. 4 Q. And you see Bloomberg does refer to a US 5 government review -- 6 A. That's right. 7 Q. -- in the first sentence, and that 8 includes a -- a link to the briefing documents -- 9 A. A link -- 10 Q. -- at the end? 11 A. Yes, okay. 12 Q. And in an efficient market, investors 13 would rapidly try to digest information as quickly 14 as possible, correct? 15 A. They would try. They wouldn't always 16 succeed, especially when there's been a year-long 17 campaign of misinformation telling people 18 otherwise -- 19 Q. But -- 20 A. -- telling people that there was a 21 significant advantage; that the CLASS study had 22 delivered statistically significant results that it 23 was better than NSAIDs; and then it turns out -- 24 you know, even qualifying that by saying this is 25 for pooled comparators removing aspirin, but when</p>	<p style="text-align: right;">Page 129</p> <p>1 Q. Yeah. Did you look at how quickly 2 Pharmacia stock reacted to material information, 3 either before or after this time period? 4 A. It wouldn't have been -- I didn't do it, 5 because it wouldn't have been relevant. I mean, 6 what's at -- what's the issue in this case -- in 7 fact, it would have been misleading, I mean, to try 8 to say that what you might have discerned from such 9 a study applies to this event, because this event 10 is very different from the kind of disclosures and 11 announcements that happened more routinely for both 12 Pharmacia and typical companies. 13 I mean, because this was a -- this was a 14 -- like I said before -- 180-degree reversal. 15 Previously people were led to believe that the data 16 supported some kind of a meaningful label 17 modification. And as it turned out, it didn't. 18 And -- and we all -- everyone knew in terms of 19 following this company that that label modification 20 was important to Celebrex; and Celebrex was 21 important to Pharmacia; and -- and therefore, the 22 CLASS study results were important for the 23 valuation of the stock. 24 So the -- so a piece of information that 25 was important for justifying investors' valuations</p>

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<p style="text-align: right;">Page 130</p> <p>1 of the stock, it's not just that it was modified or 2 corrected or changed. It was a 180-degree reversal 3 about what people -- from what people were 4 previously led to believe. 5 Q. And can you cite a -- 6 A. So -- you know, so looking at earnings 7 announcements, that's not appropriate. I mean, 8 looking at dividends announcements, that just 9 wouldn't be appropriate. Those kind of 10 announcements are different, as Patell and Wolfson 11 said. 12 Q. You've referenced at least twice to a 13 180-degree change in reversal in your answer. 14 A. Right. 15 Q. Can you cite a single analyst report or 16 anyone at all who, contemporaneous or reasonably 17 soon after these disclosures, characterized the 18 disclosure as 180-degree reversal, or something 19 substantively equivalent? 20 A. Well, over the course of those three days, 21 it became very clear -- okay. Yes. 22 If you look at the analyst reports, they 23 say going into the meeting that they expect there 24 to be a good chance of -- of label modification, 25 because they believe that the data necessary for</p>	<p style="text-align: right;">Page 132</p> <p>1 generally, they just -- analysts don't say that 2 kind of thing. They leave it to other people to 3 say that. 4 You know, they've got to keep good 5 relations with the company, because they need lines 6 of communication with the company in order to cover 7 the company going forward. So they usually don't 8 make such striking -- I mean, it happens 9 occasionally. But they generally don't make those 10 allegations. They understand that other people 11 will make them. 12 Q. And they didn't make them here, correct? 13 A. Well, over the course of the three days, 14 their -- their thinking about the drug and label 15 modification certainly changed. 16 Plenty of evidence in this case says that 17 the company itself knew that label modification -- 18 meaningful label modification wasn't likely, given 19 the CLASS results. 20 So we know what the truth was. And we 21 know what they had been led to believe; and we know 22 how they changed their beliefs -- connect the dots. 23 I'm sure they felt, to some extent -- 24 well, the way that the JAMA people felt ultimately, 25 which was deceived.</p>
<p style="text-align: right;">Page 131</p> <p>1 label modification had been produced by the CLASS 2 study. 3 Coming out of the study, coming out of the 4 three days, none of them are saying that anymore. 5 None of them are saying that -- that the CLASS 6 study supported a label modification. 7 Q. Does anyone at all -- strike that. 8 Do any of them say that there was false 9 information put out by the company before? 10 A. Well, I don't recall them using exactly 11 those words. I also do recall that, you know, that 12 issues of intent and whether it was nefarious or 13 accidental wasn't quite cleared up by the 14 marketplace until this Washington Post expose a 15 couple of months later. 16 But we do see a very clear change in their 17 thinking about label modification and GI risks 18 associated with Celebrex. 19 Q. Do any of the analysts say that the 20 company had put out false information before? 21 MR. SAHAM: Objection. Asked and 22 answered. 23 A. That would be quite a -- that would be 24 quite a severe allegation for -- for an analyst 25 who's covering a company. They usually --</p>	<p style="text-align: right;">Page 133</p> <p>1 Q. And you're offering an expert opinion on 2 how they felt? 3 A. No. 4 Q. You just said you're sure they felt that 5 way, right? 6 A. I'm not offering that as expert opinion. 7 I'm saying that -- 8 Q. You're offering that as a personal 9 opinion? 10 MR. SAHAM: Objection to form. He -- he 11 answered your question. 12 Q. So I'm asking a separate question. Are 13 you -- what -- what are you offering that as an 14 opinion on that? What sort of opinion are you 15 offering on that? 16 MR. SAHAM: Objection to form. And it 17 mischaracterizes the prior testimony. 18 A. We know that the -- the company insiders 19 thought that the CLASS data -- we all know. You 20 know. I know. Everyone who's read -- looked at 21 these documents knows that company insiders from 22 the outset of the class period did not think that 23 the CLASS data supported meaningful label 24 modification. 25 Going -- you know, because of company</p>

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<p style="text-align: right;">Page 134</p> <p>1 statements leading up to -- and even on February 2 6th, going into this FDA meeting, analysts -- many 3 analysts thought that that was a real possibility 4 to get that label modification. Coming out of the 5 meeting, they clearly, obviously, wouldn't think 6 so. 7 So their thinking -- their thinking 8 changed. Their thinking changed. 9 We know that people associated with the 10 JAMA article, the editors of JAMA, and Michael Wolf 11 did use words like "deceived" and "misled." 12 Q. Are you offering an expert opinion on what 13 company insiders knew, or didn't know, or intended, 14 or didn't intend? 15 A. Want to break that up into single 16 questions? Which one? No? Not know? Or intend? 17 Or not intend? 18 Q. Are you offering expert opinion as to 19 Defendants' intent in this case? 20 A. No, I haven't been asked to do that. 21 Q. You testified earlier that you believed 22 the documents show that company insiders knew all 23 along that a revision to the CLASS label -- sorry 24 -- revision to the -- to the warning label wasn't 25 appropriate.</p>	<p style="text-align: right;">Page 136</p> <p>1 period, understood that the CLASS data did not 2 support label modification. 3 And expert analysis by the FDA itself says 4 the same thing. 5 Q. Can you explain to the judge or jury what 6 expertise you bring to interpretation of the 7 statements you just read? 8 A. It's plain English. I read it. I mean, I 9 -- I don't think -- I haven't been asked to be the 10 person to introduce this evidence. So I -- 11 Q. You apparently have been. 12 A. No, I -- I was -- I was -- I was asked to 13 analyze loss causation, market efficiency, and 14 damages. And in the course of doing that, I -- I 15 found it appropriate to review this data, and in 16 response to your question about what insiders, in 17 my mind, knew early in the class period, I drew 18 your attention to these documents. 19 I mean, whether -- you know, this gets to 20 that -- that legal issue of, you know, how data's 21 introduced, that doesn't concern me. I'm just 22 answering your questions. 23 Q. Is intent or lack thereof relevant to any 24 of the conclusions you draw? 25 A. I -- I answered that already. I haven't</p>
<p style="text-align: right;">Page 135</p> <p>1 Is that -- are you -- are you offering an 2 expert opinion on that? 3 A. There's a -- let me see. There's a 4 document here I brought with me about that -- email 5 from Mona Wahba, memo written by Winifred Begley. 6 The new state -- I don't think I really have to 7 offer an opinion about that. I think I can just 8 draw your attention to these documents if I refer 9 to them by exhibit -- Exhibit 414, and Plaintiffs' 10 Exhibit 130 state -- I mean, in plain language, 11 that these people thought -- and I'll just read it. 12 Q. Can you do anything other than reading it? 13 A. "The data wouldn't support the 14 original intent of modify the GI warning." Okay. 15 That was from Mona Wahba. And a memo from Coughlin 16 and Begley says, "Regarding potential labeling 17 scenarios, once the CLASS data was available, 18 included an option to remove the GI warning. Based 19 on the results of the trial, this approach no 20 longer seems appropriate." 21 So I can -- and okay. The first one is 22 dated April 17th, and the second one is dated April 23 27th. So I think a reasonable person, reading 24 these documents, will draw the conclusion that 25 company insiders, near the beginning of the class</p>	<p style="text-align: right;">Page 137</p> <p>1 been asked to opine about intent. And -- and I -- 2 at this point, am not -- not doing so. 3 Q. Isn't it correct that the CLASS data 4 ultimately did support a label change? 5 A. It wasn't -- not the meaningful label 6 change that analysts anticipated going into the 7 February '01 meeting. 8 Q. What was the meeting about label change 9 you're -- you're saying that analysts anticipated 10 going into that meeting? 11 A. Well, if you look at the analyst reports, 12 they -- they talk about a removal of the GI 13 warning -- removal or -- or meaningful modification 14 of the GI warning, versus a -- of GI effects, 15 versus -- GI effects that could be caused by the 16 pain reliever. 17 The same -- the GI warning that was on 18 traditional NSAIDs, they wanted that removed or 19 modified meaningfully. 20 Q. So your -- your belief is that analysts 21 anticipated a removal of the GI warning prior to -- 22 MR. SAHAM: Objection. Misstates prior 23 testimony. 24 A. Prior to the February meeting, based on 25 information they had, analysts anticipated that</p>

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<p style="text-align: right;">Page 138</p> <p>1 that would be highly likely -- that that would be 2 likely. That would be a likely outcome. 3 Q. Ultimately, there was a label change, but 4 not a label removal, correct? 5 A. Are you talking about in February of '01? 6 Q. Ultimately. Subsequently, if you're more 7 comfortable with that. 8 A. I understand that sometime later -- months 9 later -- there was some other data included on the 10 label. 11 Q. And that some other data refers to the 12 CLASS data, correct? 13 A. Again, my recollection is a little bit 14 shaky, 'cause it's -- I believe it's well past the 15 -- the class period in this case. But it wasn't 16 what the company had been hoping for or analysts 17 had been expecting. It was much weaker. 18 Q. How was it different than what analysts 19 had been expecting? 20 How was it weaker? 21 A. Well, do we have the additional -- the 22 warning? The modification? 23 Q. No, I'd like to ask you first based on 24 your understanding. 25 A. Well, my understanding is as I just</p>	<p style="text-align: right;">Page 140</p> <p>1 analysts were anticipating was likely or possible, 2 given the CLASS data, is not at all what 3 happened -- either coming out of the February 7th 4 meeting, or even subsequently. 5 Q. Do you know what was changed on the label? 6 A. Do you mean a month later? 7 Q. Correct. 8 A. No. If you show me the document, I will 9 tell you. I might be able to tell you. 10 Q. Sitting here without the document, you -- 11 can you offer any insight on that? 12 MR. SAHAM: Object. Objection. Asked and 13 answered. Show him the document if you want to 14 know what the differences are. 15 MR. WANG: I want to know what his 16 understanding is, sitting here today. 17 A. That it was weaker. 18 Q. Can you offer any additional detail? 19 MR. SAHAM: Objection. Asked and 20 answered. 21 A. It was substantially weaker. 22 Q. And do you have any other understanding? 23 A. I actually do. But because it's 24 irrelevant to the analysis that I did do, I just 25 don't have those facts at my fingertip; and if I</p>
<p style="text-align: right;">Page 139</p> <p>1 characterized it. 2 Q. Can you offer any more specifics as to how 3 it was weaker based? 4 A. Absolutely. If I have the -- 5 MR. SAHAM: I'm going object. I'm going 6 to object. If you want to ask him specific 7 questions about a 300-page -- or however-many-page 8 label it is, and you want to say how is it 9 different from what he expected, show him the 10 document. 11 Q. Are you able to testify, as you sit here 12 today, how the actual label change differed from 13 how you say analysts expected the change? 14 MR. SAHAM: Objection. Asked and 15 answered. 16 A. Well, I actually was going to ask to see 17 the document. 18 If you give me the document and enough 19 time, I can point out the differences between what 20 they were expecting initially and what ultimately 21 happened. 22 But for the -- you know, from a financial 23 analytic perspective, even what I've just explained 24 here now is enough to understand that there was 25 loss causation, because the label change that</p>	<p style="text-align: right;">Page 141</p> <p>1 venture to guess, I think there's a high likelihood 2 I'd err. So I'd prefer not to guess. 3 But I can tell you that I -- I do know 4 that it's substantially weaker. It's not what the 5 hoped-for label change was; and -- and that's it. 6 Q. Do you know if the label -- label change 7 was favorable or unfavorable to the company? 8 MR. SAHAM: Objection. Asked and 9 answered. 10 THE WITNESS: Should I answer? 11 MR. SAHAM: I think you've already 12 answered. I mean, if there's anything more you 13 have to add without seeing, you know, that little 14 typed, you know, tiny typed label, you know; and if 15 you want to ask him about it, you should show him 16 it. 17 MR. WANG: Well, if you want to instruct 18 him not to answer, go ahead. Otherwise -- 19 MR. SAHAM: I'm not instructing him not to 20 answer. 21 Q. You can repeat -- 22 A. It was not as favorable as what the 23 company initially had hoped for and what analysts 24 anticipated could happen. 25 Q. Do you know if it was as favorable --</p>

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<p style="text-align: right;">Page 142</p> <p>1 strike that.</p> <p>2 Do you know if it was more favorable than</p> <p>3 the label, as it stood prior to the change?</p> <p>4 MR. SAHAM: Objection. And that calls</p> <p>5 for, you know, a medical FDA expert opinion. You</p> <p>6 know, what do you mean by "favorable"?</p> <p>7 You know, it's well outside his area of</p> <p>8 expertise, you know, that question; and you know,</p> <p>9 to the extent you can answer it, and to the extent</p> <p>10 you haven't already answered it, you can speak</p> <p>11 further to it.</p> <p>12 A. It's totally irrelevant to the financial</p> <p>13 analysis that I conducted and the opinions that I'm</p> <p>14 offering in this case. So I can probably venture a</p> <p>15 guess, but it's best not to.</p> <p>16 Q. Okay. And you agree with your statement</p> <p>17 made by -- strike that.</p> <p>18 You agree with the statements made by your</p> <p>19 counsel about what's outside your expertise?</p> <p>20 A. If the subsequent label change -- well, I</p> <p>21 stand by the testimony I've already given. I mean,</p> <p>22 I do believe that, you know, my understanding is</p> <p>23 that they did not get the label change they wanted</p> <p>24 initially; and that they did not get the label</p> <p>25 change that was anticipated; and they didn't even</p>	<p style="text-align: right;">Page 144</p> <p>1 those questions to.</p> <p>2 Q. Can you cite a single analyst who said</p> <p>3 that they expected a removal of the GI warning</p> <p>4 based on the CLASS data?</p> <p>5 MR. SAHAM: Objection. Misstates -- well,</p> <p>6 no -- I'll withdraw the objection.</p> <p>7 Q. Since you're flipping through the report,</p> <p>8 I take it you're not able to do so without flipping</p> <p>9 through your report?</p> <p>10 A. I want to be careful.</p> <p>11 MR. SAHAM: Well, let him answer your</p> <p>12 first question, unless you want to withdraw it; and</p> <p>13 if he wants to review his report, he can answer it.</p> <p>14 MR. WANG: I'll withdraw it.</p> <p>15 Q. Without reviewing your report, can you</p> <p>16 identify a single analyst who said they were</p> <p>17 expecting a removal of the GI warning?</p> <p>18 MR. SAHAM: And feel free to look at your</p> <p>19 report, because he cannot ask you a question and</p> <p>20 constrain you from looking at the report. It's not</p> <p>21 a memory test.</p> <p>22 A. (Witness reviews document.) Yeah, it's</p> <p>23 not a memory test. I mean, I don't have all the --</p> <p>24 Q. Go ahead. Go ahead and refer to your</p> <p>25 report.</p>
<p style="text-align: right;">Page 143</p> <p>1 get it at that time, which is the time when -- when</p> <p>2 it was anticipated.</p> <p>3 You know, more specifics than that, I -- I</p> <p>4 think you probably would want someone with more</p> <p>5 expertise in pharmaceutical labeling.</p> <p>6 Q. Is it within or outside your expertise to</p> <p>7 opine on what is a favorable or not favorable label</p> <p>8 change?</p> <p>9 A. From a financial analytic perspective, I</p> <p>10 mean, to -- you know, with the degree of detail</p> <p>11 that I've been describing the label, certainly</p> <p>12 within my area of expertise.</p> <p>13 I mean, I'm a chartered financial analyst,</p> <p>14 and I'm educated to analyze companies, including</p> <p>15 pharmaceutical companies; and I'm trained to look</p> <p>16 at the important information that is valuation</p> <p>17 relevant; and in this case, these events were all</p> <p>18 valuation relevant. To -- to that extent, yeah.</p> <p>19 It -- it certainly -- you know, digesting and</p> <p>20 processing that information is in my area of</p> <p>21 expertise.</p> <p>22 On the other hand, you know, there are</p> <p>23 details about how labels are formulated and -- and</p> <p>24 -- and the regulatory processes that go into these</p> <p>25 kind of developments, I'm not the person to ask</p>	<p style="text-align: right;">Page 145</p> <p>1 A. I don't have the contents of every analyst</p> <p>2 report memorized.</p> <p>3 (Witness reviews document.) What I have</p> <p>4 on Pages 63, 64, and 65 of my report are quotes</p> <p>5 from analysts who state that it was a possibility</p> <p>6 that it was -- that that was the intent of the</p> <p>7 study; and that it was possible -- that it was</p> <p>8 possible to get the warning label -- meaning to be</p> <p>9 modified.</p> <p>10 Coming out of the meeting, of course, they</p> <p>11 understood that the data did not support a</p> <p>12 meaningful label modification.</p> <p>13 Q. So are you able to answer my question</p> <p>14 about whether you can identify any analyst who said</p> <p>15 they were expecting a removal of the GI warning?</p> <p>16 MR. SAHAM: Objection. Asked and</p> <p>17 answered.</p> <p>18 A. Well, Page 66 we have a report from S.G.</p> <p>19 Cowen. It says, "We believe the label improvements</p> <p>20 resulting from the long-term safety data generated</p> <p>21 by the CLASS, Celebrex, and VIGOR studies, should</p> <p>22 support growth beginning in second half of 2001."</p> <p>23 There you have it.</p> <p>24 Q. You believe that S.G. Cowen expected a</p> <p>25 removal of the GI warning label, as opposed to a</p>

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<p style="text-align: right;">Page 146</p> <p>1 modification?</p> <p>2 A. Well, let's be clear. My analysis finds</p> <p>3 that, whether they had a high degree of confidence</p> <p>4 that it would be removed or -- or not, they</p> <p>5 believed there was some possibility; and -- and</p> <p>6 those expectations are what were dashed.</p> <p>7 The quote above S.G. Cowen says, "These</p> <p>8 labeling revisions will also be important in</p> <p>9 driving prescription conversion with larger managed</p> <p>10 care accounts."</p> <p>11 If this analyst didn't think there was any</p> <p>12 chance of getting a label change, he wouldn't have</p> <p>13 said that.</p> <p>14 Q. Are you holding yourself as a -- strike</p> <p>15 that.</p> <p>16 Are you -- are you an expert in the review</p> <p>17 of FDA briefing documents?</p> <p>18 A. From the financial analytic perspective,</p> <p>19 in order to understand what drives the valuation of</p> <p>20 a pharmaceutical company, I can do it, with the aid</p> <p>21 of analyst reports and other interpretive</p> <p>22 documents.</p> <p>23 I am not holding myself out to be -- it's</p> <p>24 not something I do for a living. And I'm not a</p> <p>25 medical doctor. But from the financial analytic</p>	<p style="text-align: right;">Page 148</p> <p>1 of the college endowment; and I trained these</p> <p>2 students to be financial analysts and -- and equity</p> <p>3 analysts, how to -- how to value companies and make</p> <p>4 investment decisions based on these valuations, and</p> <p>5 -- and these -- and their drafted equity analyst</p> <p>6 reports.</p> <p>7 One of the sectors that we covered was --</p> <p>8 was pharmaceuticals. So in the course of teaching</p> <p>9 students how to analyze pharmaceutical companies, I</p> <p>10 would do exactly what you just said.</p> <p>11 Q. Which companies did you -- strike that.</p> <p>12 Which trial did you review the results of?</p> <p>13 A. I don't recall specifically. But I know</p> <p>14 it was done, and done with some regularity.</p> <p>15 But I want to emphasize here that an</p> <p>16 investor would be assisted in this task by the</p> <p>17 ability to read and the availability of other</p> <p>18 analyst reports and other interpretive and</p> <p>19 informative documents about the reports.</p> <p>20 So the analysis isn't necessarily done</p> <p>21 from scratch. I mean, it -- it builds on what</p> <p>22 other people with -- with more medical expertise</p> <p>23 might be contributing.</p> <p>24 Q. Do you agree that analysts are in a better</p> <p>25 position to say how long it takes them to review</p>
<p style="text-align: right;">Page 147</p> <p>1 point of view, understanding the -- the impact of,</p> <p>2 you know, am I able to follow a pharmaceutical</p> <p>3 company and understand what data should be analyzed</p> <p>4 to -- to value a pharmaceutical company? The</p> <p>5 answer is yes.</p> <p>6 Q. Well, outside the context of litigation,</p> <p>7 have you ever reviewed FDA briefing documents on</p> <p>8 the day that they were filed?</p> <p>9 A. On the day they were filed?</p> <p>10 Q. Correct.</p> <p>11 A. I don't believe I have --</p> <p>12 Q. And --</p> <p>13 A. -- although I have reviewed FDA documents</p> <p>14 for purposes of investments -- I can't -- probably</p> <p>15 -- on days other than days they were filed.</p> <p>16 Q. Would you agree that -- strike that.</p> <p>17 Have you previously, outside the context</p> <p>18 of litigation, reviewed pharmaceutical trial</p> <p>19 results?</p> <p>20 A. Yes.</p> <p>21 Q. In what context and what --</p> <p>22 A. Well, for about eight years I was the</p> <p>23 director of a program at Babson College called the</p> <p>24 Babson College Fund, which is where a team of</p> <p>25 students that I would select would manage a portion</p>	<p style="text-align: right;">Page 149</p> <p>1 and digest information than you?</p> <p>2 A. No.</p> <p>3 Q. You're in a better position than analysts?</p> <p>4 A. Generally speaking -- generally speaking,</p> <p>5 I mean, on the general question that you asked</p> <p>6 about -- you know, who is better able to conduct a</p> <p>7 study or do the appropriate analysis to determine</p> <p>8 the speed of information impact on a stock price, I</p> <p>9 mean, that's what I have a doctorate in. I mean,</p> <p>10 that's -- that is my area of expertise. I have a</p> <p>11 doctorate. I'm a chartered financial analyst.</p> <p>12 I've taught quantitative methods. I've got, at</p> <p>13 this point, 30 years experience in the financial</p> <p>14 markets running these sorts of tests.</p> <p>15 So you know, someone who's got his nose to</p> <p>16 the grindstone and is in the trenches might have</p> <p>17 his own personal perspective of what he was</p> <p>18 thinking at a particular time, but he doesn't have</p> <p>19 the broader perspective that's informed from the</p> <p>20 quantitative analysis and understanding of the</p> <p>21 literature that I have.</p> <p>22 Q. So you're saying that you are better</p> <p>23 equipped to testify about how quickly analysts can</p> <p>24 digest information than analysts themselves.</p> <p>25 MR. SAHAM: Objection. Misstates prior</p>

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<p style="text-align: right;">Page 150</p> <p>1 testimony.</p> <p>2 A. Than any particular analyst, I would say I</p> <p>3 am. I would say absolutely. You know, a</p> <p>4 particular analyst's recollection about events on a</p> <p>5 particular day is not nearly as good as my ability</p> <p>6 to look at the market as a whole and apply my tool</p> <p>7 kit of quantitative analyses and references to the</p> <p>8 academic literature that's appropriate.</p> <p>9 Q. And is it -- is it also your testimony</p> <p>10 that you are better equipped to testify about how</p> <p>11 long it took to digest the disclosures released on</p> <p>12 February 6th than the people who actually reviewed</p> <p>13 those disclosures contemporaneously?</p> <p>14 A. Well, when you say, "the people," do you</p> <p>15 mean, like, one person, or all of the people?</p> <p>16 Q. Are you better than any or all of them?</p> <p>17 A. I'm certainly better than any of them, if</p> <p>18 that's what they were doing. I mean, if that's</p> <p>19 what their expertise is, is that they were -- you</p> <p>20 know, one particular analyst following this</p> <p>21 company, and they have the recollection about what</p> <p>22 they were doing that day. My tools, my analysis,</p> <p>23 my understanding of the literature, my</p> <p>24 understanding of the facts, my understanding of the</p> <p>25 state of the art in financial science is better</p>	<p style="text-align: right;">Page 152</p> <p>1 digested the information?</p> <p>2 A. I'm not sure what it matters about the</p> <p>3 slowest person. I didn't say -- I never said the</p> <p>4 market's only as fast as the slowest person. I</p> <p>5 said the market's not as fast as the fastest</p> <p>6 person.</p> <p>7 Q. Have you spoken with any of the Plaintiffs</p> <p>8 in this litigation about how long it took them to</p> <p>9 review and digest these disclosures?</p> <p>10 A. No. I've seen testimony, but I haven't</p> <p>11 spoken to anyone.</p> <p>12 Q. Have you spoken with any of Plaintiffs'</p> <p>13 investment managers about how long it took them to</p> <p>14 review and digest the information --</p> <p>15 A. No.</p> <p>16 Q. -- on February 6?</p> <p>17 A. No.</p> <p>18 Q. Are you aware that more than one</p> <p>19 representatives of Plaintiffs or their investment</p> <p>20 managers have been deposed in this litigation?</p> <p>21 A. My understanding is there have been</p> <p>22 depositions.</p> <p>23 Q. There have been depositions of investment</p> <p>24 managers of Plaintiffs?</p> <p>25 A. Actually, I should say -- I just don't</p>
<p style="text-align: right;">Page 151</p> <p>1 than that -- is better than what they would be</p> <p>2 bringing, which is their recollections about what</p> <p>3 they might have been doing that particular day.</p> <p>4 Now, I mean, in a theoretical world, if</p> <p>5 you assembled everyone who was following Pharmacia</p> <p>6 on that particular day, and every investor who</p> <p>7 cared about Pharmacia on that day, and every trader</p> <p>8 who was trading Pharmacia on that day -- and of</p> <p>9 course, this is unrealistic -- but in a theoretical</p> <p>10 world, well, you would still need some quantitative</p> <p>11 methodology in order to discern from this</p> <p>12 collection of people what their collective behavior</p> <p>13 was.</p> <p>14 So you know, as I talk through it right</p> <p>15 now, I'm actually thinking about this as you -- I</p> <p>16 haven't thought about this before, but as I'm</p> <p>17 talking through it right now, I think I would still</p> <p>18 be better able to analyze what the upshot of their</p> <p>19 behavior was that day.</p> <p>20 Q. And the market's only as quick as the</p> <p>21 slowest person?</p> <p>22 A. No, I never said that.</p> <p>23 Q. So what does it matter what the last</p> <p>24 person -- how long it took the last person to</p> <p>25 digest information if multiple people had already</p>	<p style="text-align: right;">Page 153</p> <p>1 know. I don't -- well, one moment. (Witness</p> <p>2 reviews document.) As I sit here right now, I --</p> <p>3 I'm not a hundred percent confident I can answer</p> <p>4 that.</p> <p>5 (Witness reviews document.)</p> <p>6 Q. Let me ask a simpler question then -- what</p> <p>7 I think's a simpler question. You can tell me if</p> <p>8 it's not.</p> <p>9 Did you make any effort to speak with any</p> <p>10 of Plaintiffs' investment managers about how long</p> <p>11 it took them to review and digest February 6</p> <p>12 disclosures?</p> <p>13 A. Well, I don't believe that kind of</p> <p>14 anecdotal evidence is reliable. So I undertook to</p> <p>15 apply the tools of my science to the question of</p> <p>16 whether or not the information we're talking about</p> <p>17 impacted the price, and over what time period.</p> <p>18 Anecdotal evidence sometimes can be</p> <p>19 informative, but it's not entirely independently</p> <p>20 reliable.</p> <p>21 Q. So can you answer my question about how --</p> <p>22 if you made any effort -- I'll strike that.</p> <p>23 Did you make any effort to speak with any</p> <p>24 of Plaintiffs' investment managers about how long</p> <p>25 it -- it took them to digest the disclosures of</p>

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<p>1 February the 6th?</p> <p>2 MR. SAHAM: Objection. Asked and</p> <p>3 answered.</p> <p>4 A. There was no need to make that effort, so</p> <p>5 I did not undertake a study that way, which would</p> <p>6 have been, in my opinion, an inferior analytical</p> <p>7 approach to what I did do.</p> <p>8 Q. Have you made any effort to talk to any</p> <p>9 analysts who were covering the industry at that</p> <p>10 time about how long it took them to review and</p> <p>11 fully understand the information disclosed on</p> <p>12 February the 6th?</p> <p>13 A. For the -- for -- actually, for the same</p> <p>14 reason and more, I don't think -- I didn't do the</p> <p>15 analysis that way, because, A, we have a record of</p> <p>16 what they were writing at the time; B, I wouldn't</p> <p>17 trust that their recollections would necessarily be</p> <p>18 reliable; C, I wouldn't necessarily believe that</p> <p>19 they would be completely forthcoming about how fast</p> <p>20 they were able to process information 10 years ago</p> <p>21 -- what am I on, D?</p> <p>22 As I said before, the kind of analytical</p> <p>23 approaches that I did use are far superior to this</p> <p>24 anecdotal surveying that you're describing.</p> <p>25 Q. So did you attempt it?</p>	<p>1 MR. WANG: Okay. Why don't we -- why</p> <p>2 don't we just do lunch now.</p> <p>3 VIDEO OPERATOR: The time is 12:39. We</p> <p>4 are now off the record.</p> <p>5 (Whereupon the deposition recessed at</p> <p>6 12:39 a.m.)</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>
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<p>1 Did you attempt to speak with any analysts</p> <p>2 about how long it took them to review and</p> <p>3 understand the information that was disclosed on</p> <p>4 February the 6th of 2001?</p> <p>5 MR. SAHAM: Objection. Asked and</p> <p>6 answered.</p> <p>7 A. There were numerous things I could have</p> <p>8 done, but I chose to do the best analysis. So I</p> <p>9 did not attempt to do -- to undertake analysis that</p> <p>10 I thought was unreliable and deficient relative to</p> <p>11 the kind of analysis I did do, including the</p> <p>12 queries you described.</p> <p>13 Q. So you didn't? Is that your answer?</p> <p>14 MR. SAHAM: Objection. Asked and</p> <p>15 answered.</p> <p>16 A. You want a crisp note of that, right? I</p> <p>17 mean, you want a crisp note. But the fact of the</p> <p>18 matter is, I -- I want to say no, because that kind</p> <p>19 of query is just unreliable, being anecdotal and</p> <p>20 imperfect, given the 10-year time lag and the</p> <p>21 motivations of analysts who might be answering that</p> <p>22 question.</p> <p>23 MR. SAHAM: George, whenever you get to,</p> <p>24 like, a convenient breaking point, could we do</p> <p>25 lunch?</p>	<p>1 VIDEO OPERATOR: The time is 1:20. We are</p> <p>2 now back on the record.</p> <p>3 Q. Professor Feinstein, you state in your</p> <p>4 report that the timing of the February 6th</p> <p>5 disclosures was irregular; is that correct?</p> <p>6 A. I do say that.</p> <p>7 Q. Is it your opinion that the market or</p> <p>8 securities analysts were somehow surprised by the</p> <p>9 fact that FDA review materials were published that</p> <p>10 -- that morning?</p> <p>11 A. Oh, I know they didn't know exactly when</p> <p>12 it would be published. I think they expected that</p> <p>13 it would be that day.</p> <p>14 Q. And they expected that because it was the</p> <p>15 FDA's standard practice at that time to publish its</p> <p>16 review materials and briefing documents the day</p> <p>17 before an advisory committee meeting; is that</p> <p>18 correct?</p> <p>19 MR. SAHAM: Objection. Assumes facts not</p> <p>20 in evidence.</p> <p>21 A. No, actually, I think the rules are that</p> <p>22 it could be within 48 hours. But even still, I</p> <p>23 believe those were new rules. And when I read</p> <p>24 Doctor Fiorino's report, it became pretty clear</p> <p>25 that he didn't know when it would be released. But</p>

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<p style="text-align: right;">Page 158</p> <p>1 what I meant by "irregular" there is not just no 2 one really knew exactly when it would be released, 3 but it's just to -- it's the kind of event that 4 doesn't happen on a regular schedule the way 5 earnings announcements do. It's not the kind of 6 thing that you're regularly accustomed to -- those 7 sort of disclosures. 8 Q. Analysts knew when this advisory committee 9 meeting was going to be, right? 10 A. The meeting, yes. 11 Q. And they knew that the FDA review 12 materials would be published a day or two 13 beforehand? 14 A. Oh. I can't speak for all the analysts. 15 I think some knew that. 16 Q. That fact was known to the market? 17 A. Probably. 18 Q. And you said earlier that this isn't the 19 kind of event that happens on a regular schedule. 20 A. Right. Earnings announcements are four 21 times a year. And they're timed pretty precisely. 22 I mean, usually there's a press release weeks in 23 advance that say when the announcements's going to 24 be made; and then there will be a follow-up 25 conference call.</p>	<p style="text-align: right;">Page 160</p> <p>1 A. Well, by "the market," I mean sufficient 2 -- a number of people, sure. I'm sure many people 3 knew that -- I'm sure many people expected the 4 materials to be published that day. 5 Q. Does the fact that -- strike that. 6 This wasn't the first time that FDA review 7 materials got posted on the Web, correct? 8 A. Probably not. 9 Q. Is it fair to say that analysts and the 10 market too had had considerable experience in 11 analyzing and digesting FDA review materials by 12 February of 2001? 13 A. The facts of this case are pretty unique. 14 I -- you know, material of this type, you know, 15 that reverses an understanding that accumulated as 16 a result of 10 months of misleading statements is 17 -- is fairly rare. 18 So I would imagine a lot of people did not 19 have experience in how to react to revelations and 20 FDA publications that directly contradicted what 21 they were led to believe by company statements 22 previously. 23 That's -- that's -- for some of these 24 people, it could have been a once-in-a-lifetime 25 event.</p>
<p style="text-align: right;">Page 159</p> <p>1 Q. Here -- 2 A. That's not what happened here. 3 Q. Here there were two months earlier noticed 4 published -- including in the Federal Register -- 5 about when the meeting would be, correct? 6 A. The meeting, not the publication of the 7 materials on the Web site. 8 Q. Is it your testimony that the publication 9 of the materials on the Web site the day before was 10 unexpected or surprising in any way to the market? 11 A. Well, the -- the timing was certainly 12 unknown. 13 Q. Was it unexpected that materials be 14 published the day beforehand? 15 A. When? As of when? 16 Q. Coming into the 7th, the morning of the 17 7th. Strike that. 18 Coming into the morning of the 6th, is it 19 your testimony that the market was not expecting 20 FDA review materials and the company's briefing 21 materials to be made available on the Web that day? 22 A. That's not my testimony. 23 Q. Do you believe that the market was, in 24 fact, expecting those materials to be made 25 available that day?</p>	<p style="text-align: right;">Page 161</p> <p>1 Q. Well, did this great reversal and this 2 directly contradictory information cause any 3 analysts to revise their Celebrex sales forecasts? 4 A. Oh, sales -- sales numbers? 5 Q. Correct. 6 A. When? Revise them when? 7 Q. Did it cause them to revise them in 8 February? 9 A. In February? Yes. Well, I mean, I know 10 that -- I know that a couple of analysts did revise 11 their sales forecasts. I'm not sure -- I can't 12 trace it specifically to that event. 13 Q. Isn't it fair to say that in an efficient 14 market where analysts do expect that new 15 information would significantly alter their 16 expectations as to sales forecasts, that they would 17 revise their sales forecasts? 18 MR. SAHAM: Objection. Assumes facts not 19 in evidence. 20 A. In an efficient market, the price reacts 21 efficiently to new information and the market's 22 understanding of that information. 23 Not all the time will that information 24 necessarily impact sales forecasts. And even when 25 sales forecasts are impacted, analysts sometimes</p>

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<p style="text-align: right;">Page 162</p> <p>1 don't always -- analysts sometimes have reasons for 2 not updating their sales forecasts. 3 Q. Do you -- 4 A. So I don't know of any study that 5 concludes that, in an efficient market, 6 analyst-published sales forecasts are updated on a 7 certain schedule, no. 8 Q. Here it's also the case that analysts did 9 not revise their earnings-per-share estimates for 10 Pharmacia on account of this February 6 disclosure; 11 isn't that correct? 12 A. On account of? Well, I know that two did. 13 I mean, you know, you -- you've seen this. You 14 know, I believe it's even in -- I forget -- either 15 Doctor Lane or Doctor Fiorino's report. 16 There are two analysts who revised 17 forecasts in -- in February. 18 Q. Downwards? 19 A. I believe so. 20 Q. Do you know who those are? 21 A. One was the Swedish firm; and the other, I 22 don't recall. But there was another one. It's 23 listed in one of the rebuttal reports. 24 Q. And you discuss in your report 25 significantly more than two analyst reports in</p>	<p style="text-align: right;">Page 164</p> <p>1 February 6, 2001 announcement? 2 A. I did not analyze the prescription trends, 3 except insofar as they were discussed in analyst 4 reports. I didn't do an independent evaluation of 5 those. 6 Q. What about the February 6th disclosures 7 was valuation relevant if it didn't cause analysts 8 to revise either earnings-per-share estimate or 9 Celebrex sales projections? 10 A. Oh, well, the information that was 11 disclosed -- again, it's my Paragraph 45. I mean, 12 what the -- what the market learned or what -- the 13 market was presented with data, which data 14 indicated that the entire study results of CLASS 15 were far less favorable to Celebrex than the 16 previously-publicly-reported six-month results. 17 Six of the seven complicated ulcers occurring after 18 the first six months of the CLASS trial were 19 suffered by patients being treated with Celebrex. 20 So Celebrex performed much worse in the second six 21 months of these trials than it did in the first six 22 months. 23 The report of GI comparisons worsened 24 after six months. The statistically significant 25 benefit for Celebrex users not taking aspirin that</p>
<p style="text-align: right;">Page 163</p> <p>1 February 2001; isn't that correct? 2 A. That's right. 3 Q. The others did not alter 4 earnings-per-share estimates; isn't that correct? 5 A. That's my understanding, yes. 6 Q. And as to sales forecasts, it's not only 7 that the Celebrex sales forecasts were not 8 substantially changed, they actually were 9 reaffirmed by analysts subsequent to the February 10 6, 2001 disclosures; isn't that correct? 11 A. Well, do you mean by reaffirm -- you mean 12 they were published again? 13 Q. Correct. 14 A. That's my understanding, sure. It doesn't 15 mean that the market didn't believe that there had 16 been negative news which would materially adversely 17 impact the valuation. 18 Q. The Swedish firm you referred to, the 19 reduction in the forecast was as compared to an 20 earnings per share estimate issued over a year 21 prior to February of 2001; isn't that correct? 22 A. I -- if you show me their report, I'll 23 verify that for you. 24 Q. Did you do anything to examine whether 25 prescription trends for Celebrex changed after the</p>	<p style="text-align: right;">Page 165</p> <p>1 Defendants reported, based upon six months of data 2 for complicated ulcers, did not hold for the entire 3 study period. In other words, what was a 4 statistically significant event or result became 5 not statistically significant. Celebrex failed to 6 establish any statistically significant difference 7 with diclofenac on any of the GI end points 8 considered; and diclofenac was actually numerically 9 superior -- superior to Celebrex on one of the two 10 co-primary end points of the study. 11 So the market had information that it now 12 had to digest. And the upshot of that information 13 was that the data did not support their -- did not 14 support their -- the likelihood that they would 15 receive the meaningful label modification that they 16 wanted. 17 Basically, the world turned upside down 18 for Celebrex and for Pharmacia. And because 19 Celebrex was so important to Pharmacia, that the 20 risk was greater going forward. I would say 21 confidence in management was -- was worse going 22 forward; and whether or not analysts chose, at that 23 juncture, to modify their sales and earnings 24 forecasts, what was clearly identified by the 25 company as being an impetus to growing sales and</p>

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<p style="text-align: right;">Page 166</p> <p>1 increasing sales -- accelerating sales going 2 forward, had been swept out from under the company. 3 Q. So even with all that information that 4 you've described and the world turning upside down, 5 as you said, analysts didn't change their valuation 6 of the company, or -- or lower Celebrex sales 7 forecasts; isn't that correct? 8 MR. SAHAM: Objection to form. 9 A. I thought we -- I recall two analysts 10 lowering sales forecasts -- sales or earnings 11 forecasts. I do recall that. 12 Q. Sales forecasts are -- for Pharmacia -- 13 strike that. 14 Celebrex sales forecasts for Pharmacia 15 were important to its valuation. 16 Is that something you'd agree with? 17 A. That's one component. That's one thing 18 that's important for the valuation, sure. Celebrex 19 was a very important product for Pharmacia. 20 But it's entirely possible that the 21 analysts were waiting for the outcome of the 22 meeting to increase the sales forecasts to reflect 23 what a positive label change would have indicated. 24 And when that didn't happen, they chose not to 25 revise what may have been conservative sales</p>	<p style="text-align: right;">Page 168</p> <p>1 prior testimony. 2 A. I'm not necessarily sure it would have 3 been built into their published forecasts. I mean, 4 analysts don't like, generally, to tinker -- I 5 mean, you know, to raise and then have to lower 6 their forecasts. They -- analysts -- many analysts 7 tend to be somewhat conservative. And when there's 8 a good reason for raising the forecast, they'll 9 raise the forecast. But they're not going to raise 10 it if they think they're -- they might have to 11 lower it again a few days later. 12 Q. So you're saying analysts are conservative 13 as to EPS forecasts, but not as to their predictive 14 valuation of companies? 15 A. I think that's actually a pretty fair 16 characterization. Analysts tend to be fairly 17 conservative with regard to how many times they're 18 going to revise their sales and earnings forecasts. 19 They don't like to have it raise them and then 20 lower them again. 21 That's my experience in observing 22 analysts' forecasts. I mean, these are published 23 forecasts. They're out on a limb. They're out on 24 the record. They -- I think, you know, the 25 literature says that, you know, there tends to be</p>
<p style="text-align: right;">Page 167</p> <p>1 forecasts previously. 2 Q. From your extensive review of the analyst 3 report documents, can you cite any analysts who 4 indicated they were waiting for the meeting to 5 increase their sales estimates of Celebrex? 6 A. Well, again, if -- I -- you're asking me 7 -- my -- my recollection of the -- of the analyst 8 reports collectively was that they believed that a 9 positive -- that a meaningful revision of the label 10 removing the NSAID GI warning would have been a 11 positive impetus to sales. That's what they 12 thought. 13 Q. And was that expectation already built 14 into the stock price prior to the February 6th 15 disclosure? 16 A. Oh, yes. Yeah. Those -- those 17 expectations, based on the information that they 18 had been fed, was in the price; and then, as their 19 understanding of the CLASS results changed, the 20 price changed as well. 21 Q. And that expectation also would have been 22 built into their earnings-per-share forecast, and 23 also their Celebrex sales forecast; isn't that 24 correct? 25 MR. SAHAM: Objection to form. Misstates</p>	<p style="text-align: right;">Page 169</p> <p>1 -- in the published numbers, there tends to be a 2 lot of optimism in the target -- in the target 3 price, but there tends to be conservatism in the 4 sales and earnings forecasts. 5 Q. So even a 180-degree reversal, as you 6 described it, and the world-turning-upside-down 7 event, as you've described it, you don't believe 8 would logically cause analysts to alter their 9 earnings-per-share forecasts or sales forecasts? 10 A. If they had not yet increased the forecast 11 to reflect a certainty that the label change would 12 happen, then when the possibility of the label 13 change was eliminated, there would be no reason to 14 revise downward, 'cause it would never have been 15 revised upward. 16 I mean, it makes perfect sense that an 17 analyst would take a wait-and-see attitude with 18 respect to publishing earnings and sales forecasts. 19 And when they waited and saw, they saw there was no 20 reason to change the numbers from the more 21 conservative numbers that were previously 22 published. 23 Q. So your belief is that the February 6, 24 2001 materials caused the market to believe that 25 the possibility of the label change was eliminated?</p>

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<p style="text-align: right;">Page 170</p> <p>1 A. They started to believe that. I mean, the 2 information was there where they can start to 3 believe that. 4 You know, the -- that conclusion was with 5 -- made its way into the stock price over the 6 course of the three days. But it -- but it -- it, 7 apparently, did begin on the 6th. 8 Q. Do you know of any analyst that said they 9 didn't believe there was any possibility of a label 10 change as a result of the February 6 disclosures? 11 MR. SAHAM: Objection to form. 12 A. In my -- you know, as -- as we mentioned 13 earlier, some of these analyst reports, they didn't 14 get published until the 8th. But nonetheless, 15 having reviewed all these analyst reports, and -- 16 my recollection is -- well, I think we have some 17 quotes in here. 18 (Witness reviews document.) They 19 expressed greater concern -- more pessimism; and 20 that pessimism, of course, intensified as we move 21 from the 6th to the 8th. 22 Q. Did anyone come to the conclusion that 23 there was no possibility of a label change? 24 A. Well, we know by February 8th they 25 certainly did.</p>	<p style="text-align: right;">Page 172</p> <p>1 traditional NSAIDs with respect to GI adverse 2 effects. 3 Q. Well, isn't it correct that the FDA 4 doesn't always follow the advisory committee's 5 recommendation? 6 A. Well, that's why I thought it was 7 important to -- to clarify. What we're talking 8 here -- about here is the advisory committee's 9 recommendation. And we know that they weren't 10 getting it. They weren't getting the advisory 11 committee's recommendation. 12 A number of analysts did comment that the 13 FDA usually does follow the advisory committee's 14 recommendation. But still, I mean, the -- the 15 likelihood of getting this label change had -- had 16 fallen away. 17 Q. I mean, the advisory committee made its 18 recommendation on February the 7th, correct? 19 A. There were deliberations, discussions, 20 opinions expressed, and a vote on the 7th, that's 21 right. 22 Q. All of that occurred on the 7th? 23 A. Yes. 24 Q. And yet, as we discussed before, the 25 majority of the stock price decline between</p>
<p style="text-align: right;">Page 171</p> <p>1 Q. Who did? 2 A. Pardon? 3 Q. Who believed that there would be no 4 possibility of a label change as of February 8th? 5 A. As of February 8th, believing there was no 6 possibility of a label change -- no. 7 Let's -- let's be clear about -- let's be 8 clear here, 'cause -- about -- this meeting was for 9 an advisory committee to make a recommendation for 10 a label change. So really, what I'm -- what I mean 11 to say is that no one on February 8th believed that 12 the advisory committee was going to recommend, on 13 the basis of the deliberations at that meeting, the 14 label change; that -- that -- you know, the 15 meaningful label change to remove the GI NSAID 16 warning. 17 By February 8th, that possibility was gone 18 that the advisory committee would make that 19 recommendation for that label change. 20 Q. But notwithstanding that, there still 21 could have been a belief that a label change would 22 be forthcoming, correct? 23 A. Not the label change that we're -- that 24 we've been talking about. Not the meaningful label 25 change that would distinguish Celebrex from</p>	<p style="text-align: right;">Page 173</p> <p>1 February the 6th and February the 8th occurred on 2 the 8th; isn't that correct? 3 A. Well -- but there's a significant drop on 4 the 7th. 5 Q. But most of the -- 6 A. And then there's -- and then it continues 7 -- the drop continues on the 8th. The drop 8 continues on the morning of the 8th. 9 Q. Actually, about 40 percent of the drop 10 occurs beginning about 3 p.m. on the 8th; isn't 11 that correct? 12 A. No, you're -- that's wrong. 13 Most of the drop takes place at the 14 beginning on February 8th; and then, over the 15 course of February 8th, the price rises and falls 16 again. It doesn't reach the low -- the 17 previously-established low for the day until the 18 close of trading, which is the close of trading 19 that day. So most of the drop takes place at the 20 open. Look at the chart on February -- 21 Q. All right. Let's look at the chart. So 22 let's -- let's begin by establishing where the 23 stock was at the close of trading on February the 24 5th. 25 If you look at your report -- and you</p>

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<p style="text-align: right;">Page 174</p> <p>1 confirm that the stock price closed at February -- 2 at 58.28 on February the 5th. 3 I believe you can get this from Page -- 4 Exhibit No. 4, which begins at Page 119. 5 A. My rebuttal report is right here. 6 (Witness reviews document.) Okay. 7 Q. So can you tell us what the three-day drop 8 is beginning February the 6th and for February the 9 8th? 10 A. (Witness reviews document.) All right. 11 February 6th -- February 5th, 2001, \$58.28; 12 February 6th, 2001, \$57.65; February 7th, 2001, 13 close is 56.13. 14 If we look at Exhibit 8 of my rebuttal 15 report, you see that it goes from the open to 16 approximately 10:20 a.m. -- it goes from that 56 -- 17 a little north of \$56, down to somewhere between 54 18 and 54.5. 19 So whereas, on February 8th it fell from 20 56.1 to 53, it had already come down to around the 21 54 level by 10 o'clock, by 10:20 in the morning on 22 February 8th. 23 Q. I guess -- 24 A. Then it goes up and down; and there's an 25 additional drop at the close, which brings you down</p>	<p style="text-align: right;">Page 176</p> <p>1 A. Well, I didn't do -- and I don't think 2 anyone in this case actually did -- an appropriate 3 intraday stock price analysis. What I can tell you 4 is that analyzing all of the information that came 5 out, and whether it would have a positive effect, 6 or a negative effect, or no effect, what I believe 7 caused the stock price drop on February 8th -- what 8 I believe the data shows had the stock price -- 9 caused the stock price drop on February 8th was the 10 market's reaction to the information about 11 Celebrex; that -- that Celebrex's -- that the CLASS 12 study results were not as positive as what had been 13 previously represented, implying that this 14 meaningful label change inevitably wasn't going to 15 happen. 16 Q. And is it just a coincidence, in your 17 expert opinion, that this very significant drop of 18 \$2.50 occurred immediately after the announcement 19 of the advisory committee's Vioxx recommendation? 20 MR. SAHAM: Objection. Assumes facts not 21 in evidence. 22 A. First of all, you said "significant." I 23 don't think anyone's proved that this was a 24 significant drop. I don't -- I haven't seen anyone 25 in this case do a legitimate intraday event study</p>
<p style="text-align: right;">Page 175</p> <p>1 at the end of February 8th to \$53. 2 Q. So the three-day cumulative drop is 5.28? 3 A. Right. Right. In the raw Pharmacia stock 4 price. 5 Q. And from 3:06 p.m., as indicated in -- in 6 Exhibit 8 of your rebuttal report -- through the 7 close, Pharmacia stock price dropped by roughly 8 \$2.50; is that correct? 9 A. Well, yeah. But we're just retracing 10 ground that -- that stock had already been over. I 11 mean, it fell from 56.13 to 54 something already by 12 10. After that, it went up and down. There were 13 some other events happening. 14 Q. And if you look at 12:51, the time that -- 15 the other time period that you indicate on this 16 Exhibit 8, which is associated with the publication 17 of a Bloomberg article, from that time period -- 18 12:51 p.m. -- through the close of trading the same 19 day, you see a similar stock price drop, correct, 20 from about 55.50 to 53? 21 A. Right. But it got to that point after 22 rising from the low that it experienced in the 23 morning. 24 Q. What caused the \$2 drop between 3 o'clock 25 and the end of the day on February the 8th?</p>	<p style="text-align: right;">Page 177</p> <p>1 where they can draw statistical conclusions like 2 statistical significance. 3 But if you look at the news of what 4 happened on February 8th, you can see that the 5 market was reacting to negative news about -- the 6 market for Pharmacia stock was reacting to negative 7 news about Pharmacia stock. There was a mix of 8 positive and negative news about Vioxx that had no 9 effect on -- on Merck's stock price. Therefore, I 10 conclude that other information that Doctor Lane 11 says probably was causing February 8th's movements 12 was not what caused February 8th stock price 13 movements; and, therefore, the drop from the open 14 to the close, which we can do with legitimate 15 statistical methodology, was caused by the Celebrex 16 CLASS study news. 17 Q. So you wouldn't agree with the 18 characterization of the \$2.50 drop from 3:06 p.m. 19 to close as significant? 20 A. I haven't seen anyone do a legitimate 21 intraday event study analysis. There are -- it's 22 -- talk about thorny data. Intraday data is very 23 difficult to work with. And it's very difficult to 24 draw conclusions of statistical significance from 25 intraday data. It's well established in the</p>

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<p style="text-align: right;">Page 178</p> <p>1 literature the challenges that have to be overcome 2 in order to draw those kinds of conclusions. 3 That's why I prefer to work with daily data. 4 Nevertheless, I mean, anectdotally looking 5 at the chart, we see there was an up and down 6 movement that retraced ground the stock had already 7 lost earlier, before any of those, you know, Vioxx 8 deliberations took place. 9 But the big drop is at the close, which is 10 more than an hour after, you know, what -- where 11 Doctor Lane says he can pinpoint -- but I believe 12 inaccurately -- the FDA decision. 13 Trades at the close don't necessarily have 14 to have been caused by trades an hour before the 15 close. Trades at the close could have happen -- 16 could be because of decisions made earlier in the 17 day and -- and stock traders and investors using 18 the closing trades to -- to get their positions 19 rebalanced effectively before the market stops 20 trading. 21 Q. Is an hour too long for the stock price to 22 react? 23 A. No, but it's -- it's long enough to say 24 that it's not necessarily because of something that 25 happened at 3:06, rather than something that</p>	<p style="text-align: right;">Page 180</p> <p>1 Q. Is it -- is it your opinion that news that 2 does not lead to a statistically significant change 3 in Merck stock price cannot still be a cause of 4 changes in Pharmacia stock price? 5 A. We -- we can't determine that it was, is 6 the problem. We -- we can't reliably prove that it 7 was caused by the information and not other 8 factors. 9 And that's another problem with intraday 10 data -- just focusing on intraday data; that, not 11 only has -- has no one run t-tests on the movements 12 to say whether the movements are large enough to be 13 considered statistically significant, but these are 14 -- are raw prices. Nobody's converted them into 15 returns. Nobody has factored out the market 16 effect. Nobody's factored out the pharmaceutical 17 sector effect. Nobody's factored out the chemical 18 sector effect. 19 And -- and because they haven't done the 20 t-tests, they also haven't factored out random 21 volatility as a possible cause. So we just don't 22 know. I mean, we can't legitimately conclude that 23 that happened. 24 Q. Are you aware that Celebrex represented a 25 far greater share of Pharmacia's sales than Vioxx</p>
<p style="text-align: right;">Page 179</p> <p>1 happened at 9:30 a.m. 2 Q. What did you do to rule out the 3 possibility that this stock price movement was 4 caused by the announcement of the advisory 5 committee's recommendation to allow a Vioxx label 6 change? 7 A. Well, I -- I did an event study on Merck 8 stock. I mean, that's basically the horse race 9 theory -- that what's good for Vioxx is bad for 10 Celebrex. And we know that Vioxx was extremely 11 important to Merck, just as Celebrex was extremely 12 important to Pharmacia. 13 And Doctor Lane says that if something's 14 material news, it's going to cause a statistically 15 significant movement in the stock price. 16 I checked to see whether there was a 17 statistically significant movement in the Merck 18 stock price that day, and there wasn't. So this 19 couldn't have been -- I mean, I know there was some 20 good news about Vioxx; and I know there was some 21 bad news about Vioxx that day. But it seems to be 22 a push, because Merck didn't move. 23 So if -- if Merck -- if it's a horse race 24 and Merck stands still, and Celebrex loses ground, 25 it's got to be because of Celebrex news.</p>	<p style="text-align: right;">Page 181</p> <p>1 did for Merck? 2 A. I looked at that very carefully. I 3 wouldn't call it a far greater percentage. I mean, 4 it was -- it was a greater percentage, but it 5 wasn't a far greater percentage. They're in the 6 same ballpark. But beyond that, there's a lot of 7 information -- newspaper articles, as well as 8 analyst reports and company statements themselves, 9 and statements from -- from Merck insiders, who 10 said that Vioxx was so important to Merck, that the 11 future of the company, as an independent entity -- 12 not sold or merged with another company -- depended 13 on Vioxx's success. 14 So you know, if your point is that Vioxx 15 was -- was inconsequential to Merck, not only is 16 there no evidence to support that position, but 17 there's plenty of evidence that says it's quite the 18 opposite. 19 Q. You're aware that analysts covering 20 Pharmacia were saying that the outcome of the Vioxx 21 advisory committee meeting would be significant to 22 Pharmacia? 23 A. There is -- well, why don't you direct my 24 attention to that. 25 Where are they saying that?</p>

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<p style="text-align: right;">Page 182</p> <p>1 Show me that. 2 Q. Sure. I will. 3 A. (Witness reviews document.) 4 Q. Here is what I'll mark as Exhibit No. 5 1002, a Bear Stearns analyst report, dated February 6 the 7th. 7 (Feinstein 1002, Bear Stearns 8 Report, 2/7/2001.) 9 MR. SAHAM: I think it's the one you've 10 got there. Is this the same one? Yeah. 11 THE WITNESS: Yeah. That's a good one to 12 look at. 13 MR. SAHAM: So you've got it. It's the 14 same. 15 THE WITNESS: Is it -- that's odd. Wait. 16 It doesn't seem -- (witness reviews document.) 17 A. Yeah. Well, this analyst is saying that 18 these negative CV risks that were found to be 19 statistically significantly associated with Vioxx 20 could provide Pharmacia a major competitive 21 marketing advantage. 22 So this is -- this analyst is saying that 23 this is bad news for Vioxx, which is bad news for 24 Merck, which should have -- which -- which 25 basically would be good news for Pharmacia and</p>	<p style="text-align: right;">Page 184</p> <p>1 A. Oh, I prepared this. 2 Q. Did you do that highlighting yourself? 3 A. Yes, I did. 4 There's one other thing I want to point 5 out about that particular analyst report. It's 6 dated February 7th, but the price that's listed 7 there for Pharmacia is the closing price from 8 February 7th. 9 So we know that this is basically a 10 February 8th report. 11 Q. Why couldn't it have been put out after 12 the market on February the 7th? 13 A. I'm sorry? 14 Q. Why couldn't it have been published the 15 afternoon or evening of February 7th? 16 A. 'Cause nobody would have known what the 17 closing price -- oh, the evening of the 7th, after 18 the close, because -- because the price that's 19 listed there is Pharmacia's closing price from the 20 7th. 21 So this is an aftermarket close on the 22 February 7th report, which is basically the start 23 of February 8th for trading purposes. 24 MR. WANG: Can I mark this as the next 25 exhibit.</p>
<p style="text-align: right;">Page 183</p> <p>1 countervails against the downward pressure caused 2 by the surprising and negative Celebrex data, which 3 indicates that my analysis of per-share damages is 4 -- is likely conservative. 5 This -- these events would have pushed 6 Pharmacia stock price up, not down. 7 I mean, I'll read the section. Just -- 8 I'm in the third set of bullet points. It says, 9 "Because Vioxx has a less favorable CV side effect 10 profile, the possibility exists that a warning 11 informing physicians of the CV risk could be added 12 to Vioxx's label. A negative Vioxx label revision 13 would provide Pharmacia/Pfizer a major competitive 14 marketing advantage." 15 And that's why it appears the chart looks 16 the way it does for February 8th -- 17 Q. And you were reading from? 18 A. -- with up and down movements that 19 basically negate each other, indicating that 20 Pharmacia's stock price movements that day likely 21 was not caused by developments in this other 22 company, Merck. 23 Q. So you're reading from the highlighted 24 exhibit that was put before you by your counsel, 25 correct?</p>	<p style="text-align: right;">Page 185</p> <p>1 (Feinstein 1003, Merrill Lynch 2 Report, 2/8/2001.) 3 Q. So this is a Merrill Lynch analyst report 4 dated February 8th, 2001. 5 Do you see that? 6 A. I do. Let me read it, please. 7 Q. Sure. 8 A. Okay. (Witness reviews document.) Well, 9 I do want to say -- why don't we say it -- that 10 here we have a report dated February 8th, which is 11 digesting the data that was initially posted on 12 February 6th; and this is one of the reasons why I 13 felt the three-day window was appropriate. 14 You have analyst reports dated February 15 8th that are helping the market understand the data 16 that was posted February 6th so... 17 Q. And this is an analyst report on 18 Pharmacia, correct? 19 A. That's right. 20 Q. And in the "Investment Highlights" on the 21 first page, it says that, "Based on the 22 inconclusive results of the CLASS trial in terms of 23 not meeting the primary end point, the advisory 24 committee recommended that the FDA not relax the 25 current warnings found on the Celebrex label with</p>

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<p style="text-align: right;">Page 186</p> <p>1 regard to gastrointestinal side effects." 2 Do you see that? 3 A. It does say that. 4 Q. And is that your understanding of why the 5 advisory committee recommended against a label 6 change? 7 A. Not entirely. I mean, it -- it goes 8 beyond that. I mean, I read those transcripts and 9 those reports pretty carefully. I mean, so they 10 didn't meet the end point -- that primary end 11 point. And then, you know, these modified end 12 points where -- these modified ex-post ad hoc -- or 13 they're ex-post -- post hoc, rather -- 14 modifications, where they removed aspirin, combined 15 the comparators, limited it to six months, you 16 know, they had been claiming that the results were 17 statistically significant in favor of Celebrex, but 18 when you look to 12 months, they weren't. 19 The reason I mention all that again is 20 because that was not the primary end point; and 21 nonetheless, it was the fact that, even on that 22 post hoc trial design, there still wasn't 23 statistical significance that favored Celebrex; and 24 that was mentioned by the FDA reviewers and the 25 committee as being a reason for not -- for there</p>	<p style="text-align: right;">Page 188</p> <p>1 understand this is before the deliberations on 2 February 8th. 3 Q. Uh-huh. 4 A. And so it's before the entire mix of 5 information related to Merck came out. 6 Q. That's right. And before that February 7 8th deliberation that you referred to, Merrill 8 Lynch is stating that, if Merck gets a superior 9 label, it could have negative implication for 10 Celebrex, correct? 11 A. Could. But what's not considered here is 12 also to what extent the committee would focus, 13 highlight, discuss, and be concerned about the CV 14 risks that were statistically significant for 15 Vioxx. So that's what's missing here. 16 The mix of news that did take place after 17 this report was written was basically a push for -- 18 for Vioxx and Merck. 19 Q. Is there anything within your regression 20 analysis that tells you that the February 8th 21 developments relating to Vioxx were not a cause of 22 the stock price drop that day? 23 A. In the regression analysis or the event 24 study analysis? 25 Q. Well, to begin with, your regression</p>
<p style="text-align: right;">Page 187</p> <p>1 being no basis for recommending the label change. 2 So it's not just that they missed the 3 primary end point. It's that basically there was 4 no statistical advantage in any legitimate design 5 for Celebrex over the traditional NSAIDs on a 6 variety of metrics. It's not just missing the 7 primary end point. We've got to make that clear. 8 So I think that's probably more answer 9 than you wanted, but it covers it. 10 Q. But it was a failure to meet the primary 11 end point that was stated as the reason why the 12 advisory committee would not recommend a label 13 change, correct, notwithstanding their -- the -- 14 the meeting of secondary end points? 15 MR. SAHAM: Objection. Misstates prior 16 testimony. 17 A. I believe that was a reason. It wasn't 18 the only reason. There was -- there was more 19 comprehensive language about no statistical 20 advantage, no clinically-established superiority. 21 Q. In the final paragraph of this analyst 22 report, there's a discussion of the possibility of 23 label change to Merck Vioxx label. 24 Do you see that? 25 A. Right. And it's -- it's important to</p>	<p style="text-align: right;">Page 189</p> <p>1 analysis. 2 A. No. I mean, as I mentioned before, the 3 regression analysis tells me that it was 4 information that moved the stock price that day. 5 An additional component of the event study analysis 6 is necessary -- and -- and I undertook it -- to 7 determine what information moved the stock price 8 that day. 9 And one thing I considered was the horse 10 race theory I refer to it -- I refer to -- that I 11 did this analysis in my original report. The horse 12 race theory says that, you know, a win for Vioxx is 13 a loss for Celebrex. But there was no win for 14 Vioxx, as you can see in the Merck event study 15 results. 16 So I excluded that as a possible 17 explanation. 18 Q. So it's your belief that the market didn't 19 view the outcome of February 8th as a win for 20 Vioxx. 21 A. Not net. Not net. And we know that, 22 because there was no statistically significant rise 23 in -- in Merck stock price that day. 24 Q. Is it your testimony that the developments 25 relating to Vioxx were immaterial to Pharmacia</p>

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<p style="text-align: right;">Page 190</p> <p>1 investors?</p> <p>2 A. No. It's not my testimony.</p> <p>3 Q. Was it material?</p> <p>4 A. That's not my testimony either. I can</p> <p>5 tell you that, in combination, it didn't move the</p> <p>6 stock price significantly. We're talking about</p> <p>7 Vioxx and Merck.</p> <p>8 I can tell you that, in combination, the</p> <p>9 mix of information that day wasn't establishing a</p> <p>10 clear advantage or a clear win for Vioxx and Merck.</p> <p>11 More analysis would be necessary to take</p> <p>12 the pieces apart, but the reality is, they didn't</p> <p>13 happen apart. They happened in a mixed fashion.</p> <p>14 VIDEO OPERATOR: There are five minutes</p> <p>15 remaining on the videotape.</p> <p>16 MR. WANG: Okay. Thank you.</p> <p>17 Q. Did you reach any conclusion on the</p> <p>18 materiality of the February 8th Vioxx developments</p> <p>19 to Pharmacia investors?</p> <p>20 A. Again, I believe individually they may</p> <p>21 have been material. But as it turns out, the facts</p> <p>22 that emerged that day basically isolated -- you</p> <p>23 know, effectively isolated Vioxx out of the</p> <p>24 picture.</p> <p>25 It was -- there was some good news. There</p>	<p style="text-align: right;">Page 192</p> <p>1 I did and all the facts, I ruled it out.</p> <p>2 MR. WANG: All right. Let's change the</p> <p>3 tape.</p> <p>4 VIDEO OPERATOR: The time is 2:06. This</p> <p>5 is the end of Tape No. 2. We are now off the</p> <p>6 record.</p> <p>7 (Recess was taken.)</p> <p>8 (Feinstein 1004, letter, 2/2/2001.)</p> <p>9 VIDEO OPERATOR: The time is 2:23. This</p> <p>10 is the beginning of Tape No. 3. We are now back on</p> <p>11 the record.</p> <p>12 (Feinstein 1005, Declaration of</p> <p>13 Scott Hakala.)</p> <p>14 Q. I've handed you what's marked as Exhibit</p> <p>15 1005, the Declaration of Scott --</p> <p>16 MR. SAHAM: 4, right?</p> <p>17 MR. WANG: It's 5, actually. We've</p> <p>18 skipped 4 for a second.</p> <p>19 Q. -- of Scott Hakala.</p> <p>20 Have you seen this before?</p> <p>21 A. I don't believe that I have, but to be</p> <p>22 perfectly certain, let me just check my documents.</p> <p>23 (Witness reviews document.) 'Cause I thought --</p> <p>24 the answer to that is no.</p> <p>25 Q. Are you aware that Doctor Hakala has</p>
<p style="text-align: right;">Page 191</p> <p>1 was some bad news. The mix was neutral.</p> <p>2 Q. So you're saying that they were equally</p> <p>3 balanced and exactly counterweighed each other?</p> <p>4 A. We can't rule that out. I mean, that's,</p> <p>5 apparently, what you see from the Merck event</p> <p>6 study. There's no statistically significant</p> <p>7 movement either way that day.</p> <p>8 Q. Are you saying the your event --</p> <p>9 A. I mean, look. I mean, we know what the</p> <p>10 news was. I mean, you know, they -- you know, the</p> <p>11 CLASS study had some -- I mean, not the CLASS</p> <p>12 study -- the VIGOR study, it was -- there was some</p> <p>13 good news on the GI front, but some really bad news</p> <p>14 on the CV front. And both of those were discussed</p> <p>15 by the FDA. And reflecting that, the market went</p> <p>16 up an and down, and ended up with no statistical</p> <p>17 movement for -- for Merck that day.</p> <p>18 Q. So are you saying that you have ruled out</p> <p>19 the possibility in your event study that the</p> <p>20 February 8th Vioxx developments were a cause of</p> <p>21 Pharmacia stock price drop, or just that you -- you</p> <p>22 can't rule out the possibility that that stock</p> <p>23 price movement was attributable to other events?</p> <p>24 MR. SAHAM: Objection to form.</p> <p>25 A. Taking into account all the analysis that</p>	<p style="text-align: right;">Page 193</p> <p>1 submitted a report on materiality and loss caution</p> <p>2 in this case?</p> <p>3 A. I was aware that -- that he had.</p> <p>4 Q. But you had not seen his report prior?</p> <p>5 A. Correct.</p> <p>6 Q. Previously?</p> <p>7 A. That's right.</p> <p>8 Q. Let me call your attention to Paragraph 43</p> <p>9 on Page 23. It reads that, "Merck's share price,</p> <p>10 by contrast, did not decline on February the 8th,</p> <p>11 2001. It modestly rose on that day due to the</p> <p>12 FDA's -- FDA panel's more favorable findings with</p> <p>13 respect to Merck's GI safety claims for its</p> <p>14 competing drug Vioxx."</p> <p>15 Do you see that?</p> <p>16 A. I see that. I disagree with that.</p> <p>17 Q. You disagree with that statement?</p> <p>18 A. Yes.</p> <p>19 Q. Why?</p> <p>20 A. As -- for the reasons we discussed before</p> <p>21 the break.</p> <p>22 Q. What part of that statement do you</p> <p>23 disagree with?</p> <p>24 A. (Witness reviews document.) He is</p> <p>25 attributing the stock price movement to new</p>

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<p style="text-align: right;">Page 194</p> <p>1 information. There's no scientific basis for doing 2 that. 3 Q. Have you spoken with Doctor Hakala at all 4 about his work in this case? 5 A. No, I have not. 6 Q. You are aware -- I think you said that you 7 were aware that Doctor Hakala had submitted a 8 report in this case on loss caution and 9 materiality; is that correct? 10 A. Yes. 11 Q. It didn't interest you at all to see his 12 report or analysis? 13 A. Oh, it -- it would have interested me. I 14 think I learned about it by reading the Court's 15 opinions, and one of them may have mentioned it. 16 But I think it's important that -- I thought it was 17 important to do the work independently and not be 18 in any way influenced or biased by what he might 19 have had to say. 20 Q. If you look at Paragraph 40 -- two pages 21 back -- Doctor Hakala, the Plaintiffs' expert 22 states that, "While a preliminary finding of 23 inadequate statistical evidence was posted on the 24 FDA's Web site on Tuesday, February the 6th, as 25 indicated in the quotes in Appendices 2 and 3, most</p>	<p style="text-align: right;">Page 196</p> <p>1 Q. Do you agree with that statement? 2 A. I don't think that the reaction began only 3 on the 7th, but I do believe that on the 7th the 4 market's understanding of the news was sufficiently 5 clear to cause a significant negative reaction. 6 That doesn't necessarily mean that the 7 reaction was constrained and confined to February 8 7th. There was some reaction on the 6th and some 9 on the 8th. 10 Q. In Paragraph 41 Doctor Hakala states that, 11 "It is clear from the news and analyst reports and 12 from the trading volumes in Pharmacia shares that 13 most of the relevant information that changed 14 investors' expectations occurred on February the 15 7th and February the 8th, and the only plausible 16 explanation was investor and analyst reactions to 17 an analysis of the oral FDA hearing on February the 18 7th." 19 Do you see that? 20 A. I see it. 21 Q. And is that a correct statement of Doctor 22 Hakala's? 23 A. I'm not exactly sure how he means -- how 24 he intends it to be understood. 25 Q. Do you agree with the statement?</p>
<p style="text-align: right;">Page 195</p> <p>1 analysts and investors waited for the results and 2 comments from the oral FDA hearing on February the 3 7th to react." 4 Do you see that? 5 A. I see that. 6 Q. Do you agree with that statement? 7 A. Well, it depends what you mean by "react." 8 I mean, he's -- I mean, we know that the analysts 9 -- most of the analysts did write their reports on 10 the 7th and the 8th, not the 6th. 11 So if that's what you mean by -- by 12 "react" with respect to the analysts, it seems like 13 he's correct. Observably, verifiably correct. 14 In terms of the investors, we do see a 15 larger stock price movement on the 7th than there 16 was on the 6th, which I guess could be -- is -- is 17 a basis for this conclusion, but there are other 18 explanations that can't be ruled out. 19 Q. Doctor Hakala proceeds in the next 20 sentence to state that, "The news by the afternoon 21 of February the 7th and the evening of February the 22 7th, was sufficiently clear to begin to cause a 23 significantly negative reaction." 24 Do you see that? 25 A. I see it.</p>	<p style="text-align: right;">Page 197</p> <p>1 A. (Witness reviews document.) I don't agree 2 that -- my understanding -- my read -- my analysis 3 and my reading of the facts motivate me to -- I 4 would describe it differently. 5 I mean, the same phenomenon that he's 6 describing, I would describe differently. I would 7 say -- I don't think it's that the information 8 occurred on February 7th and 8th. I believe it's 9 the processing of the information that was 10 originally posted on the 6th took place. Much of 11 the processing of the information took place on the 12 7th and 8th, where -- so it's not that the -- that 13 the events occurred on the 7th and the 8th, but the 14 process of the information being digested by the 15 market and being understood was -- was facilitated 16 by events on the 7th and 8th. 17 Q. So this is another thing Doctor Hakala got 18 wrong? 19 A. Well, I don't -- 20 MR. SAHAM: Object to the form of the 21 question. 22 A. I don't think it's wrong entirely. I just 23 -- it's just not clear how he means it to be 24 understood. I mean, you know, the distinctions 25 we're making here today between, you know, when</p>

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<p style="text-align: right;">Page 198</p> <p>1 something was posted, and when something -- when 2 that information that was posted became well 3 understood, might not have been what he was writing 4 about in Paragraph 41. 5 Q. Well, what he says is that most of the 6 relevant information that changed investors' 7 expectations occurred on February the 7th and the 8 8th. 9 A. Well, tell me -- 10 Q. So do you -- 11 A. -- what does it mean for information to 12 occur? I usually don't hear the words phrased that 13 way. Does information occur? I mean, information 14 becomes available and events occur. 15 What does it mean for information to 16 occur? 17 Q. Well, do you agree with this statement? 18 A. I don't know how to interpret it, 'cause I 19 don't know what he means by "information occurred." 20 Q. And he is saying -- do you see -- that it 21 is clear that most of the relevant information that 22 changed investors' expectations occurred on 23 February 7th and the 8th, right? 24 A. Again, if you can explain to me what it 25 means that information occurred, I can tell you</p>	<p style="text-align: right;">Page 200</p> <p>1 facts not in evidence. 2 A. I -- I think I have more of an objection 3 with the way he edits than with the way he thinks. 4 I just think, you know, reading this in context, 5 which the only context we've had the opportunity 6 this morning or this afternoon to do is this 7 paragraph. 8 I'm not sure his thinking is wrong. I -- 9 it looks to me like maybe he just is being 10 inarticulate in explaining it. 11 Q. Well, let's -- let's go back to there -- 12 actually, to February the 6th. 13 That afternoon -- well, let me strike that 14 and let me give you a document first. 15 This is Exhibit No. 1004. 16 MR. SAHAM: Do you have two? 17 THE WITNESS: No, one. 18 MR. SAHAM: Oh, you only have one? 19 Q. This is the FDA warning letter, which I 20 believe you discuss in your report, correct? 21 A. Yes. In -- that's right. (Witness 22 reviews document.) 23 Q. And you can't tell from the letter itself, 24 but as -- as you state in your report, this FDA -- 25 the receipt of this FDA letter was publicized, the</p>
<p style="text-align: right;">Page 199</p> <p>1 whether or not it was clear. But unless I 2 understood that better -- if he were here today, I 3 could ask him, What do you mean when you say 4 information occurred? Do you mean the information 5 was processed, or the events occurred? 6 If we get that clarified, I can offer an 7 opinion about whether he's right or wrong. 8 Q. And he continues in the sentence to say, 9 "The only plausible explanation was investor and 10 analyst reactions to an analysis of the oral FDA 11 hearing on February the 7th." 12 Do you see that? 13 A. I see that. Well, I believe what happened 14 was the market was facilitated by the oral FDA 15 hearing to understand better the meaning and import 16 of the data that was presented initially on the 17 6th. 18 That's -- that's how I see the facts. And 19 frankly, it's not how I see the facts. It's what 20 the facts are. 21 Q. So you disagree here with Doctor Hakala's 22 statement that investor expectations were changed 23 due to their reaction to the analysis of the oral 24 FDA hearing on the 7th; is that -- is that correct? 25 MR. SAHAM: Objection to form. Assumes</p>	<p style="text-align: right;">Page 201</p> <p>1 -- postmarked it on February the 6th, correct? 2 A. I'd like to look it up in my report. 3 Q. Paragraph 267. 4 A. 267? (Witness reviews document.) Okay. 5 Q. Do you agree that this was posted by the 6 FDA? Strike that. 7 You say in your report that this was 8 posted by the FDA on February the 6th, correct? 9 A. I was relying on this Reuters news 10 article. 11 Q. So you don't know whether the statement 12 you make in your report is true or not? 13 A. No, that's not what I said. 14 Q. Do you believe it to be true -- go ahead. 15 A. (Witness reviews document.) I need to 16 verify that this letter is the letter that was 17 referred to in the article that I referred to in 18 267. I'll take your word for it, but that's what 19 I'm doing. I'm taking your word for it. 20 Q. Well, actually, I don't know what letter 21 you're referring to, because I don't think you 22 expressly specify. 23 So let me ask you to review it and -- and 24 ask you to confirm that this is the letter you're 25 referring to.</p>

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<p style="text-align: right;">Page 202</p> <p>1 A. Okay. Can we see the Reuters news 2 article? Do you have that here? 3 Q. That I do not have. 4 A. (Witness reviews document.) It seems to 5 be. It seems to be what was referred to in the 6 Reuters article. 7 Q. And if you look at the final page of this 8 letter in a section entitled, "Conclusions and 9 Requested Actions," this FDA letter says, "We are 10 seriously concerned that your promotional 11 activities described above raise significant health 12 and safety concerns, because they minimize crucial 13 risk information and promote Celebrex for 14 unapproved new uses." 15 Do you see that? 16 A. I -- I see the words, but give me a moment 17 to refresh my memory. 18 Q. Sure. 19 A. (Witness reviews document.) Okay. 20 Q. Would you agree that the fact that the FDA 21 is warning about serious concerns that it had is a 22 fact that Pharmacia investors would care about? 23 A. Apparently, in this particular incident -- 24 with respect to this incident, no. And I draw that 25 conclusion from the fact that it just wasn't</p>	<p style="text-align: right;">Page 204</p> <p>1 underlying CLASS results; isn't -- isn't that 2 correct? 3 A. When? 4 Q. February 6, 7, 8th, 2001. 5 MR. SAHAM: Objection. Assumes facts not 6 in evidence. 7 A. Oh, I -- I don't think the way you 8 characterized it is correct. 9 Q. The focus of analysts during this time 10 period in their reports is on the advisory 11 committee's recommendation made the afternoon of 12 February the 7th; isn't -- isn't that correct? 13 A. And you're disassociating that from the 14 CLASS results? You can't do that. 15 Q. Well -- 16 A. The CLASS results were why they were going 17 to the FDA advisory committee to request label 18 change. The two are tied together. 19 Q. But the focus of analysts was on the 20 advisory committee recommendation, correct? 21 MR. SAHAM: Objection. Assumes facts not 22 in evidence. 23 A. Which is a function of whether or not the 24 CLASS study was successful or not. 25 Q. Was the study successful?</p>
<p style="text-align: right;">Page 203</p> <p>1 mentioned in the analyst reports that I read. 2 Q. So if something's not mentioned in the 3 analyst report, then, by definition, it's not 4 significant to Pharmacia investors. 5 Is that your opinion? 6 A. No. But if it's not mentioned anywhere -- 7 I mean, if it's -- I mean, if it's not mentioned in 8 the analyst reports, and there's -- there's, you 9 know, one news article about it, and it's an event 10 that's similar to other events that previously 11 occurred and didn't seem to be of interest to the 12 analysts or the investors, and it also seems to be 13 fairly confined to -- not necessarily a large 14 segment of the people who -- who were buying this 15 drug, I think it's fair to conclude that it -- that 16 it had de minimis effect on the stock price. 17 Q. The lack of discussion in any analyst 18 reports, that's a significant fact to you in your 19 analysis? 20 MR. SAHAM: Objection. Misstates prior 21 testimony. 22 A. It is an important fact that none of the 23 analysts mentioned this. 24 Q. And it's also true that none of the 25 analysts -- other than J.P. Morgan -- discussed the</p>	<p style="text-align: right;">Page 205</p> <p>1 A. Well, in a number of ways, it wasn't. 2 Specifically, according to Dr. Lawrence Goldkind, 3 analyzing all of the data that came out of the 4 study, he says, "No difference was seen between 5 Celebrex and diclofenac. So if the purpose of the 6 study was to differentiate Celebrex from diclofenac 7 on GI safety, it failed." 8 And then he says also, "No conclusions 9 regarding of safety of Celebrex compared to 10 traditional less-selective Cox inhibitors as a 11 group are possible." If the purpose -- and the 12 company said this was the purpose -- if the purpose 13 was to get -- if the purpose was to establish 14 superiority with respect to GI safety relative to 15 traditional NSAIDs, it failed. 16 MR. SAHAM: And can you just read what 17 exhibit you're reading from so the record's clear. 18 THE WITNESS: It's Goldkind No. 2. 19 MR. SAHAM: Thanks. 20 Q. So you're referring to a presentation by 21 Goldkind -- let's strike that. 22 You're aware that, in addition to the 23 February 6th marketing warning that was made public 24 on the afternoon of the 6th, on the morning of the 25 7th, there was also the release of review and</p>

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<p style="text-align: right;">Page 206</p> <p>1 briefing materials relating to Vioxx, correct?</p> <p>2 A. Oh, yes.</p> <p>3 Q. And you're aware that those documents</p> <p>4 showed, based on Vioxx's VIGOR trial, the potential</p> <p>5 for increased cardiovascular risk in Vioxx?</p> <p>6 A. Yeah. I'm aware that the VIGOR trial</p> <p>7 established a statistically significant -- well,</p> <p>8 there was a statistically significant higher</p> <p>9 incident of adverse CV effects in the VIGOR</p> <p>10 patients -- in the Vioxx patients -- compared to</p> <p>11 their -- I guess it was naproxen was the comparator</p> <p>12 in that trial.</p> <p>13 Whereas, in the Celebrex CLASS trial,</p> <p>14 there was no such statistically significant</p> <p>15 association with CV risks.</p> <p>16 Q. And that's potentially confounding</p> <p>17 information for your event study analysis, correct?</p> <p>18 A. No, I didn't see it that way for February</p> <p>19 7th. I mean, my understanding -- and my</p> <p>20 understanding is supported by, actually, Fred</p> <p>21 Hassan, who commented about this after the -- the</p> <p>22 FDA meeting -- was that the FDA was focused on each</p> <p>23 drug individually, based on each drug's respective</p> <p>24 study. The CV risks were about Vioxx. The CV</p> <p>25 risks were not associated with Celebrex.</p>	<p style="text-align: right;">Page 208</p> <p>1 Celebrex use and -- and CV risks -- a statistically</p> <p>2 significant relationship.</p> <p>3 And -- and the FDA reviewer said the same</p> <p>4 thing.</p> <p>5 Q. You're not an expert on CV risks, are you?</p> <p>6 A. Not specifically, no.</p> <p>7 Q. Are you generally an expert on CV risks?</p> <p>8 A. No. I mean, except insofar as it's</p> <p>9 necessary to understand these issues in order to</p> <p>10 analyze Merck and Celebrex -- I'm sorry -- Merck</p> <p>11 and Pharmacia.</p> <p>12 Q. These same materials -- and now we're</p> <p>13 talking about the February 7th Merck -- Merck/Vioxx</p> <p>14 review materials and briefing documents -- they</p> <p>15 also showed favorable GI data for Vioxx, right?</p> <p>16 A. They did.</p> <p>17 Q. Data suggesting that Vioxx had a -- a</p> <p>18 better GI safety profile would put Celebrex at a</p> <p>19 competitive disadvantage under the same horse race</p> <p>20 theory that you were just referring to?</p> <p>21 A. That information was known. I mean, the</p> <p>22 results of the VIGOR study was known. So there was</p> <p>23 nothing new about that that -- that occurred on --</p> <p>24 on February 7th.</p> <p>25 I guess what was new on February 7th with</p>
<p style="text-align: right;">Page 207</p> <p>1 Q. So it's your opinion that the data</p> <p>2 indicating increased CV risks in Vioxx didn't lead</p> <p>3 investors to have any concern about Celebrex's CV</p> <p>4 profile?</p> <p>5 A. Well, they may have seen this as a net</p> <p>6 advantage for Celebrex. In fact, I think Celebrex,</p> <p>7 at some point, tried to exploit this as a -- as a</p> <p>8 marketing advantage -- that their competitor had</p> <p>9 these associated CV risks. I mean, so it could be</p> <p>10 considered, you know, confounding information in</p> <p>11 the other direction that -- that it actually</p> <p>12 supported the Pharmacia stock price in the face of</p> <p>13 all this other negative news about CLASS and</p> <p>14 Celebrex. But I don't see it as a net negative</p> <p>15 that could explain any of the drop that Pharmacia</p> <p>16 experienced on February 7th.</p> <p>17 Q. Are you --</p> <p>18 A. I mean, if, you know, in the horse race</p> <p>19 theory -- which we've talked about before and</p> <p>20 Doctor Lane seems to adhere to or embrace, and</p> <p>21 Celebrex, I believe, tried to exploit this as a</p> <p>22 marketing advantage -- this was a net negative for</p> <p>23 the competitor, not for Celebrex.</p> <p>24 I did -- I don't recall seeing anywhere --</p> <p>25 actually, I'm -- a significant association between</p>	<p style="text-align: right;">Page 209</p> <p>1 respect to Vioxx was, you know, the heavy emphasis</p> <p>2 that the FDA reviewers were putting on the CV</p> <p>3 risks. But the -- the VIGOR study results had been</p> <p>4 touted by Merck, you know, just -- just as the</p> <p>5 Celebrex CLASS study results had been disseminated</p> <p>6 by Pharmacia.</p> <p>7 Q. What did you do to rule out the</p> <p>8 possibility that the release of the Vioxx data on</p> <p>9 February the 7th were -- was a confounding event</p> <p>10 for your Pharmacia event study?</p> <p>11 A. I verified, from looking at analyst</p> <p>12 reports, that it was consistent with what the</p> <p>13 market had already known about the VIGOR study.</p> <p>14 Q. So you're saying none of the data</p> <p>15 disclosed on February the 7th was previously</p> <p>16 unknown to invest -- analysts?</p> <p>17 A. I can't say that every single datum in the</p> <p>18 reports was previously known and -- and made</p> <p>19 available, but the upshot of it all was consistent</p> <p>20 with what the market expected going into that day</p> <p>21 with respect to Vioxx and Merck.</p> <p>22 Q. Are you aware what happened to Merck stock</p> <p>23 price on February the 7th?</p> <p>24 A. It went down.</p> <p>25 Q. Why was that, if everything was expected?</p>

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<p style="text-align: right;">Page 210</p> <p>1 A. Well, I did -- I did look at the news. 2 Again, you know, the focus -- most of the focus of 3 my analysis was on Pharmacia. But I did look at 4 the news; and I understand quite a bit about Merck. 5 I think it's because of the negative 6 emphasis on the CV risks -- I mean, the emphasis on 7 the negative CV risks, which -- which was probably 8 more -- which was unexpected. That was the new 9 unexpected piece; that the FDA was going to be that 10 concerned about the CV risks. 11 I think there -- there may also have been 12 some spreadsheet effect from what happened to 13 Celebrex that, you know, maybe the market's 14 confidence in believing pharmaceutical companies to 15 honestly and completely, in a nonmisleading 16 fashion, convey the results of their studies may 17 have been shaken. 18 So people saw that their prior knowledge 19 or -- or beliefs about CLASS and Celebrex were 20 wrong, maybe that, having lost that confidence or 21 having had that confidence shaken because of the 22 news from Pharmacia may have caused some people to 23 see the risks associated with investing in Merck 24 were higher than previously anticipated. 25 That could have -- could explain the drop.</p>	<p style="text-align: right;">Page 212</p> <p>1 A. That's debatable. With respect to Merck, 2 yeah, you may have had some control over it, based 3 on the way that they had previously described the 4 VIGOR results. Whether what the FDA said was 5 consistent or inconsistent with what the market had 6 been previously led to believe, can't rule that 7 out. 8 Q. Well, if it was already known, then why 9 was there such a significant price movement on 10 February the 7th? 11 A. Well, that's a different question than 12 what you asked before. 13 I didn't say -- let's -- let's -- we'll go 14 around in circles, but the -- you said did they 15 have any control over it? That was your earlier 16 question. And I said that they could have had some 17 control over the surprise over the FDA's concern by 18 perhaps modifying the way they had -- the company 19 had -- "the company" here being Merck -- had 20 described the VIGOR data earlier. 21 Apparently, the way they described the 22 VIGOR data was such that, when the FDA posted these 23 materials, there was information in there that was 24 surprising. 25 Q. All right. Let's -- let's shift focus to</p>
<p style="text-align: right;">Page 211</p> <p>1 Q. So the market's confidence in 2 pharmaceutical companies such as Pharmacia, in 3 putting out truthful information, was already 4 shaken by the beginning of February the 7th, 5 correct? 6 A. Yeah. But it doesn't mean it didn't 7 continue to be shaken on the 8th, if that's what 8 you're getting at. 9 Q. And wasn't the VIGOR CV data -- I think 10 you said it was already previously known prior to 11 the 7th, correct? 12 MR. SAHAM: Objection. Misstates prior 13 testimony. 14 A. It had been released and discussed. 15 Q. And understood or not? 16 A. Well, the understanding that the market 17 arrived at from that data was consistent with what 18 they were observing in the briefing documents on 19 the 7th, with the exception of, you know, the 20 degree of FDA concerns over those CV risks and this 21 naproxen theory about why the CV result was 22 observed. 23 Q. And that degree of FDA concern wasn't 24 something within Merck's control, correct? 25 MR. SAHAM: Objection to form.</p>	<p style="text-align: right;">Page 213</p> <p>1 Pharmacia now on February 7th. The advisory 2 committee's recommendation against the label change 3 that day, that's -- that's a critical event for 4 Pharmacia investors; isn't it? 5 A. What -- I'm sorry, the meeting? The vote? 6 The deliberations? What? The discussion? Which 7 part? 8 Q. The vote and recommendation in particular. 9 Why don't we begin there. 10 A. No. The reason why I'd have to say no is, 11 as people understood what the data said -- if 12 people had understood what the data said, they 13 would have understood that that vote was 14 inevitable. 15 Q. Did they understand or not, prior to the 16 vote and recommendation? 17 A. Some did. Some didn't. The vote 18 expedited the understanding. But the vote -- with 19 a full understanding, the vote would have been 20 deemed inevitable. 21 It was a unanimous vote. And the language 22 was very clear about why it was a unanimous vote; 23 that -- that the study just failed to justify this 24 label change that was sought. 25 Q. Well, prior to the vote the afternoon of</p>

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<p>1 February the 7th, was there a full understanding in 2 the market? 3 A. No. 4 Q. So given that there wasn't, wasn't the 5 February 7th advisory committee recommendation a 6 significant event to Pharmacia investors? 7 A. Well, insofar as it helped market 8 understand the import of the data, not as an 9 independent intervening event. 10 Q. So you view the market as more concerned 11 about what the data says or doesn't say than about 12 the FDA's advisory committee's recommendation on 13 what should be done in light of that data. 14 Is that your testimony? 15 A. That's not -- that's not my testimony. 16 Q. What's more important then? Is it more 17 important what the data says, or is it more 18 important what the FDA's advisory committee's 19 recommending in light of that data? 20 A. You know, the way you're asking the 21 question is prone to mis -- it would make my answer 22 prone to misunderstanding. I'm going to try to 23 explain it. I think -- I did say it already, but I 24 don't think you understood. It's not your fault. 25 I mean, this is complex and voluminous information</p>	<p>1 With the posting of the data, people 2 started to get the understanding that the label 3 change was not going to happen. And so we see the 4 stock price beginning to fall on that day. 5 It's difficult data to understand. It's 6 difficult data to interpret. As the discussions 7 began to take place on February 7th, it became 8 clearer and clearer -- but not perfectly clear -- 9 just clearer and clearer that the label change was 10 not going to happen. 11 Had it been perfectly understood -- had 12 there been plenty of time for people to analyze the 13 data, they would have known on the morning of 14 February 7th. 15 Because of how difficult this -- this 16 stuff is to understand, the vote, when it took 17 place, was what educated the marketplace as to the 18 meaning of the data. So -- and then the 19 dissemination of the deliberations, the discussion, 20 and the vote on the 8th further informed the 21 marketplace of what had taken place. 22 Q. Well, how is it that the market could have 23 perfectly predicted that there wouldn't be a label 24 change when, in fact, there was a label change 25 based on this CLASS data or based on the nine-month</p>
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<p>1 here that has to be processed. So it takes more 2 than a few minutes to understand this. And 3 probably a few more passes, and we'll all 4 understand it. 5 But ultimately, the label change is what 6 was the critical event -- I mean -- the label 7 change -- the decision as to whether or not the 8 label change would -- would occur. 9 The data it -- had the data been made 10 available in April of 2000, then people would have 11 known, as of April of 2000, just as company 12 insiders knew, that the recommendation for a label 13 change was not going to happen based on that data. 14 If this information had become made known 15 at the time of the JAMA article, well, then, at 16 that point, the stock price would have fallen, 17 because people would have understood that the label 18 change they were seeking was not likely to be 19 approved. 20 If it had happened two days before the FDA 21 meeting, if that -- if there was -- if that full 22 understanding had come to the marketplace that this 23 label change was not going to be approved, then I 24 believe the stock price change would have happened 25 then.</p>	<p>1 CLASS data? 2 A. Well, I think we're -- we're talking 3 about -- 4 MR. SAHAM: Do you think the gentleman 5 could leave the coffee, because it's a little 6 distracting. Sorry. Could you just leave the 7 thing there -- and -- it's no problem. Sorry. 8 (Discussion off the record.) 9 (Question read back.) 10 MR. WANG: I'll just restate it. 11 Q. How was it the market could have 12 predicted -- as you said it would have -- that 13 there would be no label change based on the CLASS 14 data, when, in fact, there was subsequently a label 15 change allowed on account of this same CLASS data? 16 MR. SAHAM: Objection. Assumes facts not 17 in evidence. 18 A. We're talking about two different label 19 changes. That's how. The label change that they 20 were seeking is not the label change that 21 ultimately took place. 22 So my discussion is about the label change 23 they were seeking. So a label change that would 24 have differentiated Celebrex from traditional 25 NSAIDs, removing the GI warning that -- or</p>

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<p>1 meaningfully modifying or removing the GI warning 2 that's associated or -- with traditional NSAIDs. 3 Your label change is something 4 different -- the one that you're talking about, the 5 one that ultimately happened. 6 Q. You're saying that that label change that 7 ultimately happened didn't differentiate Celebrex 8 from traditional NSAIDs? 9 A. Not the way that was originally hoped for 10 by the company and -- and discussed by analysts 11 when they were talking about a label change. 12 Q. What sort of label change needed to happen 13 in order for it to be meaningfully modifying, as 14 you -- as you use that term? 15 A. What they were looking for -- what's 16 described in company marketing materials and 17 analyst reports is -- they were hoping that the 18 label change would be -- would be justification for 19 insurance companies and prescribers to favor 20 Celebrex over traditional NSAIDs. 21 And so what they needed was something that 22 said that the serious side effects that are caused 23 by traditional NSAIDs doesn't happen with Celebrex. 24 That's what they needed. That's what they were 25 hoping for.</p>	<p>1 MR. SAHAM: Objection to form. 2 A. They said that the CLASS study had 3 established -- well, let me get these words exactly 4 right, 'cause I think you're going to parse them if 5 I say them wrong. So slow down just a bit and get 6 the exact words. 7 What they did say was -- I need the 8 February -- I need the April press release. I have 9 it here. (Witness reviews document.) 10 THE WITNESS: Is this it? 11 MR. SAHAM: Yeah. 12 A. (Witness reviews document.) And I'm not 13 going to give you all of it. I'm just going to 14 give you an excerpt. This is not all of what the 15 problem was, but part of what the problem was. 16 "The study funded by Searle and Pfizer found that 17 Celebrex patients experienced significantly fewer 18 symptomatic GI ulcers and ulcer complications 19 compared with ibuprofen or diclofenac." 20 People reading that who understand these 21 issues would think that a meaningful label change 22 had a high degree of likelihood. 23 Q. Nothing in what you read says that the 24 company's position is that CLASS justified a 25 removal of the warning label, though.</p>
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<p>1 Q. And a label change isn't an entirely 2 binary event, correct? 3 MR. SAHAM: Objection to form. 4 Q. There could be removal of a label change, 5 or there could be modifications of a label change. 6 MR. SAHAM: Objection to form. 7 A. Well, I don't -- I mean, you think we have 8 to get into, you know, those -- those finer 9 distinctions. But the facts show that what the 10 analysts understood the company was hoping for did 11 not happen in the -- in the -- at the February 12 meeting. 13 So with respect to what the analysts were 14 focused on -- which is what I believe investors 15 were concerned about -- you could say it's a binary 16 event. But -- but the outcome that they were 17 hoping for did not happen. 18 Q. Did the company ever say that they thought 19 there would be a removal of the GI warning? 20 MR. SAHAM: Objection to form. 21 A. They wanted one. They said they wanted 22 one. 23 Q. Okay. But did they ever say that they 24 were predicting there would be a removal or 25 elimination of that warning?</p>	<p>1 A. You know, that's why analysts follow 2 companies. They understood that this kind of a 3 finding, a successful clinical trial was what -- is 4 what was necessary to get the commercial advantage 5 of a label change. 6 So when they see a -- a press release come 7 out and say that the study succeeded in 8 differentiating Celebrex from traditional NSAIDs, I 9 don't -- it's -- I don't want to -- it's almost 10 like code for the analysts that this is going to 11 lead to a label change and commercial -- 12 acceleration of -- of sales. 13 Q. So your testimony is that April 17th, 2000 14 press release is -- in code -- saying that the 15 company believes there's a high degree of 16 likelihood of a label removal. 17 A. You asked how it would be interpreted by 18 financial analyst. I'm telling you how a financial 19 analyst would interpret it. I am a financial 20 analyst. Understanding that a label change had 21 commercial value, understanding that a label change 22 is only going to happen if they can differentiate 23 themselves from traditional NSAIDs in the area 24 specifically for which Celebrex was engineered 25 initially, coupled with a company announcement that</p>

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<p style="text-align: right;">Page 222</p> <p>1 the -- that the study was essentially successful, 2 communicates that the label change is likely to 3 happen. 4 Q. Did you speak with anyone else about your 5 interpretation of this as saying there's a high 6 degree of likelihood of a label change? 7 Did you speak with any of the Plaintiffs, 8 for example, to see if that was their read of this 9 too? 10 MR. SAHAM: Objection to the form. 11 A. The -- it's not necessary to quantify 12 exactly how high the probability of label change 13 was. What's easy to observe -- I mean, easy with 14 -- with the tools that I have at my disposal -- is 15 the impact of whatever degree of probability that 16 was being diminished by the full facts of the CLASS 17 study coming to light. 18 Q. Okay. But what I'm asking about is your 19 interpretation of this press release. You have 20 said more than once that you understood this press 21 release as saying there is a high degree of 22 likelihood of a label removal or label change, 23 notwithstanding the fact it's not in there. 24 And my question to you is, have you spoken 25 with anyone else who read this document --</p>	<p style="text-align: right;">Page 224</p> <p>1 A. Well, those words aren't used. But 2 there's certainly a lot in here which would -- 3 well, in fact, we know that the company, you know, 4 knew that a label change was unlikely, given the 5 full truth. 6 Q. Is there any -- 7 A. What this -- what this press release did 8 is -- is create undue optimism about the 9 possibility of a label change. 10 Q. Is there any statement in this press 11 release that the company was expecting or 12 anticipating a label change? 13 A. The words aren't here that the company was 14 expecting a label change on the basis of these 15 results. But I think it's clear from the facts and 16 analyses beyond mine that this press release, on 17 account of the false and misleading statements that 18 are in it, created undue optimism about a label 19 change. 20 Q. But it doesn't say that the company's 21 expecting a label change. 22 MR. SAHAM: Objection. Asked and 23 answered. 24 A. It doesn't use those words. 25 Q. The press release doesn't go further and</p>
<p style="text-align: right;">Page 223</p> <p>1 MR. SAHAM: Objection to form. Misstates 2 prior testimony. 3 Q. -- about what their interpretation of this 4 document was? 5 A. Yeah. I do think either you're misstating 6 what I said or misunderstanding what I said, or 7 maybe there's a possibility that I said it wrong. 8 The press release essentially says that 9 the CLASS study was successful and communicates -- 10 in a way that communicates that there's a basis for 11 this label change. And what we observe with 12 rigorous quantitative analysis is that, with the 13 full set of facts, that kind of optimism would not 14 have been -- and ultimately wasn't -- warranted. 15 Q. Okay. It's one thing to say that there's 16 a basis for a label change. But it's different to 17 say that the company expected there'd be a label 18 change. 19 Is there anything in here which says that 20 the company expected or anticipated the label 21 change? 22 A. Did you say -- say that again. You said 23 is there anything in here? Is that what you said? 24 Q. Which says that the company expected or 25 anticipated the label change.</p>	<p style="text-align: right;">Page 225</p> <p>1 say the company's expecting the -- the GI label to 2 be completely eliminated either; does it? 3 A. It doesn't use words -- exactly those 4 words, of course not. 5 Q. Do you see code for those words here? 6 A. A complete elimination of the label? 7 Again, what this press release does is it creates 8 undue optimism for a meaningful label change. 9 Q. Is there any code in here? You mentioned 10 before there's code here. 11 Is there any code for the company saying 12 that they expect the label to be -- the GI label to 13 be eliminated? 14 A. Let me explain what -- 15 MR. SAHAM: Objection. Asked and 16 answered. 17 A. Let me explain what I mean by "code." 18 Analysts in a company -- for any company, analysts 19 in the company are in communication all the time. 20 Analysts know what they're looking for. The 21 company knows what analysts are looking for. 22 Words that might have one meaning to 23 someone who's not familiar with the company or 24 familiar with stock analysis might have different 25 meanings to people who are following a particular</p>

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<p style="text-align: right;">Page 226</p> <p>1 company.</p> <p>2 To give the impression that this study</p> <p>3 established a GI safety advantage for Celebrex</p> <p>4 relative to traditional NSAIDs communicates a basis</p> <p>5 for -- for optimism about a label change.</p> <p>6 The company knew it. That's my</p> <p>7 professional opinion. Frankly, I think you know it</p> <p>8 too.</p> <p>9 Q. How does optimism about a label change get</p> <p>10 you to expectation of removal of the GI label?</p> <p>11 MR. SAHAM: Objection. Asked and</p> <p>12 answered.</p> <p>13 A. Well, the label change we're talking about</p> <p>14 is -- is a label change that meaningfully</p> <p>15 differentiates Celebrex from traditional NSAIDs on</p> <p>16 the basis of adverse GI events.</p> <p>17 So if -- if that's the removal of the</p> <p>18 Black Box Warning or something similar, that</p> <p>19 distinction I don't have to make. We're talking</p> <p>20 about a meaningful label change that would allow,</p> <p>21 like, insurance companies to say, This is a better</p> <p>22 drug. People aren't going to die of bleeding</p> <p>23 ulcers as much if they take this drug instead of</p> <p>24 the other drug.</p> <p>25 Q. What's the significance to the market of a</p>	<p style="text-align: right;">Page 228</p> <p>1 less frequently than maybe the market does.</p> <p>2 Q. So you're saying analysts consistently and</p> <p>3 routinely put out sales forecasts that they -- that</p> <p>4 they do not believe represent their best estimate</p> <p>5 of sales.</p> <p>6 Is that your testimony?</p> <p>7 MR. SAHAM: Objection. Misstates prior</p> <p>8 testimony. And to form.</p> <p>9 A. Well, as we saw in an analyst report that</p> <p>10 we read today, at least one analyst said he was</p> <p>11 going to take a wait-and-see attitude, which is --</p> <p>12 which is -- which is consistent with what analysts</p> <p>13 do. They don't want to have to admit that they</p> <p>14 were wrong about making a change, so they tend to</p> <p>15 be prudent and conservative when publishing new</p> <p>16 numbers.</p> <p>17 Q. Do you believe that analysts' publication</p> <p>18 of sales forecasts represents their best estimate</p> <p>19 at the time of the publication of future sales?</p> <p>20 MR. SAHAM: Objection. Calls for</p> <p>21 speculation. Incomplete hypothetical.</p> <p>22 A. Right. We'd have to look on an -- on an</p> <p>23 analyst-by-analyst basis and a case-by-case basis</p> <p>24 to answer that.</p> <p>25 Q. Well, you talk about --</p>
<p style="text-align: right;">Page 227</p> <p>1 label change if the label change or lack thereof</p> <p>2 doesn't affect Celebrex sales or people's</p> <p>3 expectations about Celebrex's sales?</p> <p>4 MR. SAHAM: Objection. Assumes facts not</p> <p>5 in evidence.</p> <p>6 A. Is this a hypothetical? Because the fact</p> <p>7 of the matter is, a label change was expected by</p> <p>8 the company to affect sales.</p> <p>9 Q. And once it was learned in February 2001</p> <p>10 that the label change was not forthcoming, did a</p> <p>11 whole bunch of people run out there and revise</p> <p>12 their sales projections down?</p> <p>13 Is that your testimony?</p> <p>14 A. We talked about this already. There's a</p> <p>15 difference between analysts changing their</p> <p>16 published sales forecasts and the market expecting</p> <p>17 there to be a different sales path going forward.</p> <p>18 There's a big difference between that. And the</p> <p>19 reason I -- this morning I explained why there's --</p> <p>20 why there's a difference between those two</p> <p>21 concepts.</p> <p>22 Analysts don't like to have to revise a</p> <p>23 change. I mean, if they make a change, they don't</p> <p>24 want to have to go back and say, I shouldn't have</p> <p>25 made that change. So they -- they tend to revise</p>	<p style="text-align: right;">Page 229</p> <p>1 A. I can't make a blanket judgment about all</p> <p>2 times.</p> <p>3 I do believe that they tend to be</p> <p>4 conservative about the frequency of having to make</p> <p>5 changes.</p> <p>6 And wouldn't you be in their shoes? I</p> <p>7 mean, it's just -- that's -- that's rational</p> <p>8 behavior.</p> <p>9 Q. Is it understood in the market that</p> <p>10 analysts don't always put out what they believe to</p> <p>11 be their best estimate of sales forecasts?</p> <p>12 MR. SAHAM: Objection. Misstates prior</p> <p>13 testimony. Assumes facts not in evidence.</p> <p>14 Incomplete hypothetical.</p> <p>15 A. Well, there's a lot of research done on</p> <p>16 what's in analyst reports; and that research</p> <p>17 understands that those kind of determinations is</p> <p>18 generally made on a case-by-case basis.</p> <p>19 Q. And in the case of Pharmacia analyst</p> <p>20 reports, does the market believe analysts don't put</p> <p>21 out their best estimates of sales forecasts?</p> <p>22 MR. SAHAM: Objection. Assumes facts not</p> <p>23 in evidence. Incomplete hypothetical. Misstates</p> <p>24 prior testimony. And asked and answered.</p> <p>25 A. You're asking did the market -- yeah.</p>

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<p style="text-align: right;">Page 230</p> <p>1 First of all, I'm not -- I'm not accepting the 2 premise that -- but I -- I think analysts 3 understood -- I mean, I think -- I think 4 sophisticated investors -- at least -- understand 5 that analysts tend to be prudent with respect to 6 the frequency of having to make revisions. 7 Q. What premise didn't you accept there? 8 THE WITNESS: Can you read the question 9 again. 10 (Question read back.) 11 MR. SAHAM: Same objections as before. 12 A. Well, it seems like you're implying that 13 we know that they always are not putting out their 14 best forecasts. And what you mean -- first of all, 15 what we mean by "best forecasts" is -- is up for 16 interpretation. But you know, being prudent about 17 making revisions is not the same thing as -- as 18 putting out a forecast that you believe is wrong. 19 Q. Analysts don't do that, right? 20 MR. SAHAM: Objection. 21 A. No, I think they are prudent about -- 22 MR. SAHAM: Wait. Wait. Wait. Let me 23 object. I'm sorry. Objection to form. Incomplete 24 hypothetical. 25 Q. I'll be more specific. Analysts don't put</p>	<p style="text-align: right;">Page 232</p> <p>1 Pharmacia returns? I didn't do that. 2 Q. Yeah. So you didn't -- 3 A. We know there's a structural relationship 4 between the two. 5 Q. Did you test to see whether, if you had 6 done what you described as New Monsanto as an 7 independent or explanatory variable, that there'd 8 be -- whether there was -- there would be 9 statistical significance in that event? 10 A. Well, you mean significance on the 11 coefficient, I assume? 12 Q. Correct, in the New Monsanto. 13 A. Well, we know there's a structural 14 relationship. We know that once -- that Pharmacia 15 owned a certain number of shares of Monsanto -- 16 Q. That we -- 17 A. -- and as a result, those shares -- as the 18 value of those shares of Monsanto changed, the 19 value of Pharmacia would change by that same 20 amount. 21 So there's a structural relationship that 22 doesn't necessarily have to be estimated. 23 Q. Can you estimate whether there is a 24 statistically significant relationship between New 25 Monsanto returns and Pharmacia returns?</p>
<p style="text-align: right;">Page 231</p> <p>1 out forecasts that they believe are wrong, correct? 2 MR. SAHAM: Objection to form. Incomplete 3 hypothetical. And assumes facts not in evidence. 4 A. I believe the rational behavior -- and 5 there's a lot of literature on this -- rational 6 behavior for an analyst weighs the possibility of 7 being wrong with the possibility of having to make 8 a subsequent retraction; and -- and the forecasts 9 they put out balance those competing adverse 10 scenarios, and sophisticated investors understand 11 that. 12 Sometimes they -- the analysts will 13 specifically say that, Coming out of this meeting, 14 there may be new sales forecasts. So we understand 15 that the numbers presented there are preliminary 16 and not yet updated. And that was the case at 17 least with one analyst here. 18 Q. Let me ask you about your construction of 19 -- of -- of the first of two regression analyses 20 that you did. The one that takes out Monsanto. 21 A. Okay. 22 Q. Did you check to see there was a 23 statistically significant relationship between 24 Pharmacia returns and New Monsanto returns? 25 A. You mean regress Monsanto returns against</p>	<p style="text-align: right;">Page 233</p> <p>1 A. I mean, given that there's a -- I mean, 2 you probably could, but given that there's a 3 structural relationship, running a regression 4 that's subject to errors and variables and noise is 5 a second-best approach. 6 Q. Where is the "probably" in that? What -- 7 why can't you just stick in New Monsanto as an 8 independent variable? 9 A. Well, I don't know why you would want to 10 do that. I mean, we know what the structural 11 relationship is. We know that Monsanto owns that 12 number of shares. And as the value of those shares 13 changed, so would the value of Pharmacia. I 14 mean -- 15 Q. But what -- 16 A. -- just as if I owned a certain number of 17 shares of Monsanto, and Monsanto shares go up by a 18 certain amount of dollars, I know that my net 19 wealth has gone up that same number of dollars. 20 Q. Well, you don't know -- 21 A. So there's a structural relationship. 22 Q. But you don't know, notwithstanding the 23 structural relationship, if there is a 24 statistically significant causal relationship 25 between the price of New Monsanto and the price of</p>

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<p style="text-align: right;">Page 234</p> <p>1 Pharmacia, right?</p> <p>2 A. No. We absolutely know that there is a</p> <p>3 causal relationship, because they own the shares.</p> <p>4 There's no dispute about that -- how many shares</p> <p>5 they owned.</p> <p>6 Q. My question --</p> <p>7 A. Whether it shows up in a regression in</p> <p>8 which you're also introducing noise is -- is</p> <p>9 another matter in a -- that is not necessary to</p> <p>10 investigate, because we know the structural</p> <p>11 relationship.</p> <p>12 Q. So you've never done an event study where</p> <p>13 your regression includes, as an explanatory</p> <p>14 variable, a subsidiary wholly or partly owned by</p> <p>15 the company you're investigating?</p> <p>16 A. I don't believe that I have.</p> <p>17 Q. And doesn't your analysis assume that the</p> <p>18 daily stock price of New Monsanto traded on an</p> <p>19 efficient market?</p> <p>20 A. I thought about that after looking at the</p> <p>21 rebuttal reports. Just to be safe, I checked. You</p> <p>22 know, I ran a Cammer analysis on -- on Monsanto and</p> <p>23 -- and found that it is efficient.</p> <p>24 I'm not entirely sure that it has to be,</p> <p>25 given that we can remove the effect of Monsanto</p>	<p style="text-align: right;">Page 236</p> <p>1 A. I didn't.</p> <p>2 Q. In your other event study, you --</p> <p>3 A. Well, wait. That's not -- I -- I did.</p> <p>4 One moment. I did -- one moment, please. (Witness</p> <p>5 reviews document.)</p> <p>6 THE WITNESS: Do you have the rebuttal</p> <p>7 report?</p> <p>8 A. (Witness reviews document.) I replicated</p> <p>9 Doctor Lane's regression, so I believe I also</p> <p>10 replicated his sector index.</p> <p>11 Q. Did you consider using -- in designing</p> <p>12 your own study, before responding to Doctor Lane --</p> <p>13 any alternative industry or sector index?</p> <p>14 A. I don't recall that I did that. I think I</p> <p>15 did not.</p> <p>16 Q. In your other event study -- the -- the</p> <p>17 one where your independent variable is the actual</p> <p>18 Pharmacia stock, you included both a sector index</p> <p>19 for -- for the pharmaceutical sector, and one for</p> <p>20 the chemical sector; is that right?</p> <p>21 A. That's right.</p> <p>22 Q. Why did you feel it necessary to include a</p> <p>23 variable for the chemical industry?</p> <p>24 A. Because there was this division that was</p> <p>25 in the chemical and agriculture business.</p>
<p style="text-align: right;">Page 235</p> <p>1 valuation changes -- regardless of why they</p> <p>2 happen -- from having an impact on Pharmacia's</p> <p>3 valuation --</p> <p>4 Q. Well --</p> <p>5 A. -- simply by subtracting the value of</p> <p>6 Pharmacia's holdings of Monsanto.</p> <p>7 Q. Well, your goal was to remove the value of</p> <p>8 the chemicals business of Pharmacia, correct?</p> <p>9 A. I removed the value of the holdings of</p> <p>10 Monsanto stock.</p> <p>11 Q. You don't describe your goal as removing</p> <p>12 the effects of the chemical business owned by</p> <p>13 Pharmacia?</p> <p>14 A. Well, by removing the value of the</p> <p>15 chemicals division, I'm removing the impact of the</p> <p>16 chemicals sector on Pharmacia.</p> <p>17 Q. How did you choose your industry index?</p> <p>18 A. I was looking for a -- a broad,</p> <p>19 comprehensive index on pharmaceuticals that --</p> <p>20 that's basically -- I mean --</p> <p>21 Q. Did you --</p> <p>22 A. -- that's one of the well-known,</p> <p>23 generally-accepted, widely-used indices that</p> <p>24 represents the pharmaceutical sector.</p> <p>25 Q. Did you consider any alternatives?</p>	<p style="text-align: right;">Page 237</p> <p>1 Q. Did you test to see whether your model</p> <p>2 would have had a higher predictive value had you</p> <p>3 left out that variable?</p> <p>4 A. I saw -- I think it was Doctor Lane's</p> <p>5 critique on that. And so I didn't do that analysis</p> <p>6 independently, because if you add an extra</p> <p>7 variable, you're not going to hurt the regression.</p> <p>8 You might not help it. But you're certainly not</p> <p>9 going to hurt it.</p> <p>10 He looks -- he makes that judgment about</p> <p>11 what the better fit is on the basis of adjusted</p> <p>12 R-squared. And so is a the adjusted R-squared goes</p> <p>13 down just slightly a tiny bit, that's the wrong</p> <p>14 analysis.</p> <p>15 The adjusted R-squared is a measure that</p> <p>16 would tell you goodness of fit sort of on a</p> <p>17 per-variable basis. It tells you whether it's</p> <p>18 worth it to put in other variables, whether the</p> <p>19 extra, you know, the loss of degree of freedom from</p> <p>20 the extra variable is worth the better goodness of</p> <p>21 fit.</p> <p>22 But it doesn't tell you which has the</p> <p>23 better -- the better fit. The unadjusted</p> <p>24 R-squared, which is -- which is a more direct</p> <p>25 measure of fit, is actually higher with the</p>

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<p style="text-align: right;">Page 238</p> <p>1 chemical sector index than without; and that's -- 2 in fact, it was either in his own tables that he 3 provided or -- or table that I rep -- that I 4 developed when I replicated his work. 5 But again, the differences were very 6 slight. 7 Q. So the higher adjusted R-squared doesn't 8 indicate a more precise regression in your -- in 9 your view? 10 A. Oh, no. The higher R-squared does. A 11 higher adjusted R-squared does not necessarily 12 indicate a better fit. 13 Q. Did you -- strike that. 14 Do you agree that it didn't make a 15 material difference to your analysis whether you 16 include the chemical variable or not? 17 MR. SAHAM: Objection. Misstates prior 18 testimony. 19 A. Frankly, I -- I just don't remember, but I 20 know that the correct procedure would be to account 21 for -- accommodate a chemical sector affect when 22 you're looking at a company that's got a major part 23 of the company devoted to the chemicals business. 24 Q. You used the same time period in the 25 second event study analysis as you did in the</p>	<p style="text-align: right;">Page 240</p> <p>1 A. Sure it does. I mean, there's certain 2 value to consistency. If I had changed the 3 estimation period for different runs of the test, 4 one, we wouldn't be able to compare how the results 5 changed simply on the basis of changing the 6 dependent variable; I mean, we wouldn't be 7 controlling for that one factor; and then, clearly, 8 it would open me up to criticism from you folks. 9 You know, you'd say, Gee, why did you change the 10 estimation period? You're not being consistent. 11 So I mean, consistency is valuable. 12 Q. Well, do you test to see whether you got a 13 higher R-squared or adjusted R-squared if you use a 14 different time period such as the class period? 15 A. Well, I don't think that's a relevant 16 consideration, because what we're really trying to 17 do is -- is use the regression to determine what is 18 typical stock price behavior around the dates of 19 the event. 20 So you know, my -- my estimation period is 21 contemporaneously closer to the events I test than 22 is Doctor Lane's. Whether he gets a very high 23 R-squared from some very distant period or not is 24 not a reason for choosing a different estimation 25 period. It's not a justification. It's not a good</p>
<p style="text-align: right;">Page 239</p> <p>1 first, right? 2 A. You mean with -- looking at deMonsantoized 3 Pharmacia stock, as opposed to raw Pharmacia stock 4 prices? Those two regressions? 5 Q. Yeah. My only question is, did you use 6 the same time period in those two regressions? 7 A. Time periods for what? 8 Q. The time period you used for the data in 9 the -- in the regression analysis. 10 A. The estimation period -- 11 Q. Correct. 12 A. -- yes, I did. 13 Q. Estimation period. 14 A. October to October. 15 Q. Your estimation period, I think you 16 explain, was necessitated in the -- what do you 17 call it -- Pharmacia pharmaceuticals model -- 18 because of the fact that New Monsanto did not IPO 19 until some date during the class period; is that 20 correct? 21 A. That made it necessary. There are other 22 advantages to using that time period for the 23 estimation. 24 Q. That consideration doesn't apply to the 25 other regression analysis you did, correct?</p>	<p style="text-align: right;">Page 241</p> <p>1 justification. 2 Q. So is it your testimony shorter is better 3 in terms of estimation periods? 4 MR. SAHAM: Objection. Misstates prior 5 testimony. 6 A. There's some value to being more 7 contemporaneous, having shorter distance -- I mean, 8 I -- we both have one year, but my one year 9 straddles the event. His one year precedes the 10 event, which means the beginning of his estimation 11 period is a full year away from the event, whereas, 12 the beginning of my estimation period is less than 13 a year from the event. 14 I mean, so these are all considerations 15 that -- look, I had to choose one method. You 16 know, I had to choose a method to -- to present 17 here. And they were all good reasons. I mean, 18 there were a number of reasons, and they were all 19 good reasons. I mean, being consistent with the -- 20 with the deMonsantoized Pharmacia stock regression 21 is one reason; and the closer proximity -- the 22 closer temporal proximity of the estimation period 23 to the events is another consideration. 24 Q. Now, you -- you report the results of two 25 models here.</p>

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<p style="text-align: right;">Page 242</p> <p>1 Do you -- do you have a view as to which</p> <p>2 one is better?</p> <p>3 A. The deMonsantoized.</p> <p>4 Q. And why is that?</p> <p>5 A. Absolutely, because it structurally -- it</p> <p>6 structurally controls for chemical industry effects</p> <p>7 based on a known valuation relationship, rather</p> <p>8 than an estimation. It's the difference between</p> <p>9 estimating something and knowing something.</p> <p>10 I used a model that takes advantage of the</p> <p>11 fact that we know the valuation relationship</p> <p>12 between Monsanto and -- and Pharmacia.</p> <p>13 Q. Well, isn't it the case that the second</p> <p>14 one had a higher predictive value measured in terms</p> <p>15 of R-squared and adjusted R-squared?</p> <p>16 MR. SAHAM: Objection to the form.</p> <p>17 A. Oh, the -- well, over -- I'm not sure. I</p> <p>18 mean, over -- want to show me that data?</p> <p>19 Q. Well, let me begin by asking you, was that</p> <p>20 an appropriate question to look at?</p> <p>21 A. No. I just don't think that it is.</p> <p>22 Q. Why not?</p> <p>23 A. Well, for one thing, I mean, it's -- I --</p> <p>24 I don't believe that, even if you can show me a</p> <p>25 numerical difference, that it's statistically</p>	<p style="text-align: right;">Page 244</p> <p>1 inflation and higher per-share loss. But that's</p> <p>2 not the reason for picking one model or the other,</p> <p>3 and certainly not something I even considered in</p> <p>4 determining that the deMonsantoized Pharmacia</p> <p>5 series was the better series to use for the</p> <p>6 regression.</p> <p>7 Q. Okay. I got --</p> <p>8 A. What it did -- I mean, I believe that the</p> <p>9 5.92 is the more precise number, because we are</p> <p>10 using a known valuation relationship instead of an</p> <p>11 estimated valuation relationship.</p> <p>12 Q. Okay. So from Exhibits 9 and 12,</p> <p>13 actually, you can determine that Exhibit 9 gives</p> <p>14 you -- the model reflected in Exhibit 9 gives you a</p> <p>15 higher damages estimate; is that correct?</p> <p>16 A. On a per-share basis, yes.</p> <p>17 Q. Would it be different on any other basis?</p> <p>18 A. I would have to run the aggregate damages</p> <p>19 model to know. I can probably -- well, I don't</p> <p>20 want to guess at it here. But I probably could.</p> <p>21 Q. Let me call your attention to Paragraph</p> <p>22 207 of your report. Now, what --</p> <p>23 A. What paragraph -- which paragraph?</p> <p>24 Q. 207. It's the Section beginning 204.</p> <p>25 A. (Witness reviews document.) Okay.</p>
<p style="text-align: right;">Page 243</p> <p>1 significant -- you know, that one has a</p> <p>2 statistically significant better fit than the</p> <p>3 other. I mean, if, in fact, it is the case that</p> <p>4 you've identified some numerical difference.</p> <p>5 But again, I mean, you know, when you --</p> <p>6 estimation is about estimation. Estimation is</p> <p>7 about discerning facts from -- from the unknown.</p> <p>8 If I can replace a -- a component that has to be</p> <p>9 estimated with a component that I know with</p> <p>10 certainty, I'll always choose the latter.</p> <p>11 Q. Let me -- the model with -- strike that.</p> <p>12 The model excluding New Monsanto, that</p> <p>13 gives you a higher damages estimate than the other</p> <p>14 models, correct?</p> <p>15 A. I'm not sure. Let me check. (Witness</p> <p>16 reviews document.)</p> <p>17 MR. SAHAM: I think it's Exhibits 9 and</p> <p>18 12, if that's what you're looking -- if you're</p> <p>19 looking for the two regressions.</p> <p>20 Q. Yeah. I don't think you report the</p> <p>21 results, but you can take a look through. But he's</p> <p>22 right, 9 and 12 are the regression analysis.</p> <p>23 MR. SAHAM: I didn't mean to butt in. He</p> <p>24 was looking.</p> <p>25 A. It does indicate a higher per-share</p>	<p style="text-align: right;">Page 245</p> <p>1 Q. In this paragraph you say that the -- the</p> <p>2 results of the complete CLASS study had been</p> <p>3 released to the market six months earlier, along</p> <p>4 with the FDA advisory committee reports.</p> <p>5 Do you see that?</p> <p>6 A. Yes.</p> <p>7 Q. And that's a reference to the February</p> <p>8 disclosures that we have been discussing here</p> <p>9 during this deposition?</p> <p>10 A. Yes.</p> <p>11 Q. And then you state in the next sentence,</p> <p>12 you say, "In the interim, the market had already</p> <p>13 revalued Pharmacia stock to reflect the negative</p> <p>14 economic impact of the CLASS results."</p> <p>15 Do you see that?</p> <p>16 A. I do.</p> <p>17 Q. What are you referring to by "in the</p> <p>18 interim"?</p> <p>19 How long did it take the market to reflect</p> <p>20 this information?</p> <p>21 A. Well, what I say here is that certainly by</p> <p>22 August, it was reflected. As I say elsewhere in</p> <p>23 the report, I couldn't detect any subsequent price</p> <p>24 changes that I was confident could be traced to the</p> <p>25 CLASS data after February 8th.</p>

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<p style="text-align: right;">Page 246</p> <p>1 Q. Your analysis of the August disclosure in 2 particular concluded that those disclosures did not 3 have a statistically-significant impact on 4 Pharmacia stock price, correct? 5 A. That's right. 6 Q. And what length event window did you use 7 for August? 8 A. Well, to be consistent with the prior 9 event study, I used a three-day window. But I also 10 looked at each day individually. 11 Q. Why did you use a three-day window if -- 12 A. I just said, in order to be consistent 13 with the earlier event study. 14 Q. Did you believe the Washington Post 15 editorial to be complex or voluminous? 16 A. It wasn't voluminous. 17 Q. Complex? 18 A. It certainly was irregular. I mean, no 19 one knew that -- I mean, I don't think the market 20 was expecting a report on that day. 21 And to some extent, it was complex. So I 22 -- so I looked at three days. 23 Q. Do you think -- is it -- strike that. 24 Is it your opinion that the market took 25 three days to digest and understand the Washington</p>	<p style="text-align: right;">Page 248</p> <p>1 It doesn't matter which window size you 2 pick. The result is the same. 3 Q. Do you have any opinion as to the proper 4 event window for the August disclosure? 5 A. I hadn't formed one. 6 Q. You hadn't as of the time of the report or 7 -- I mean, do you have one today? 8 A. No. I could think about it some more. I 9 think sometimes it's -- it's necessary to present 10 all the data so that, you know, people with -- you 11 know, can see for themselves that it doesn't make a 12 difference in this case. 13 I didn't have to -- I mean, given that it 14 didn't make a difference, I didn't have to make 15 that determination. 16 Q. Okay. Thinking about it more, do you have 17 an opinion on the proper event window for August? 18 A. I -- I still don't. 19 Q. In the next paragraph you say that, "Only 20 new valuation relevant information should cause a 21 stock price reaction in an efficient market." 22 Do you see that? 23 A. I do see that. 24 Q. Do you agree with that statement? 25 A. Yes.</p>
<p style="text-align: right;">Page 247</p> <p>1 Post editorial? 2 A. I don't -- I did not detect a -- I could 3 not conclude that it -- that the price moved at all 4 as a -- as a result of that article, rather than 5 random volatility over each of those days -- or the 6 days collectively. 7 Q. Now, you -- you said that consistency was 8 a factor in you using three days for August; is 9 that -- 10 A. Right. Just understanding what kind of 11 criticisms might come from your -- your rebuttal 12 experts. 13 Q. Well, didn't you -- didn't you say earlier 14 that you have to analyze every event individually 15 and determine the appropriate event window for that 16 event? 17 A. Yeah. I did that, taking into account 18 that you folks would certainly claim it to be a 19 deficiency if I wasn't consistent with the earlier 20 event window. 21 Q. So what did you conclude the appropriate 22 event window was after your analysis? 23 A. Well, I didn't have to, really. I -- I 24 looked at three days. I looked at one day. And 25 looked at each day within the three-day window.</p>	<p style="text-align: right;">Page 249</p> <p>1 Q. Would you agree that there was no new 2 valuation relevant information disclosed in August 3 of 2001? 4 A. It was new, but apparently, it wasn't 5 valuation relevant as of that date, probably 6 because what people focus on for valuing this 7 company had already been incorporated and digested. 8 Q. All right. So you say in this sentence, 9 "Since only new valuation relevant information 10 should cause a stock price reaction in an efficient 11 market, the lack of significant movement following 12 this event is consistent with market efficiency." 13 Do you see that? 14 A. Yes. 15 Q. So can you explain what you mean by that 16 sentence? 17 A. Well, in order to -- well, okay. For -- 18 for a test of market efficiency, you want to see if 19 information that should move the stock price by a 20 large amount did, in fact, move the stock price by 21 a large amount. 22 And in this case, given that the market 23 was focusing on, you know, more quantifiable 24 financial metrics for -- for Pharmacia, it's not -- 25 and that information had already been disseminated</p>

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<p>1 and digested, it made sense that this new 2 announcement -- although it basically added 3 understanding and color to what had previously 4 occurred; people understood a little bit more of 5 the back story that they didn't know before -- the 6 front story was already well digested into the 7 stock price. So the stock price -- one wouldn't 8 expect the stock price to move on this news. 9 Q. So you weren't surprised by the results of 10 your -- 11 A. Precisely. 12 Q. -- August event -- 13 THE WITNESS: Can we to take a little 14 break now? 15 MR. WANG: Yeah. Sure. 16 VIDEO OPERATOR: The time is 3:42. We are 17 now off the record. 18 (Recess was taken.) 19 VIDEO OPERATOR: The time is 4:01. This 20 is the beginning of Tape No. 4. We are now back on 21 the record. 22 Q. Professor Feinstein, in your report you 23 have discussion of the PSLRA bounce-back period, 24 correct? 25 A. Yes.</p>	<p>1 a legal opinion, no. 2 But for what it's worth, I mean, my 3 interpretation, as a financial analyst, of what's 4 intended by the statute is that it should be one of 5 those two dates. 6 I mean, I don't want to say that I am in a 7 better position to make that legal determination 8 than the lawyers or the judge. I'm certainly not. 9 Q. Okay. But you -- you are offering an 10 opinion of the statutory language based on your 11 interpretation as a financial analyst? 12 A. I guess what I'm saying is that my 13 understanding as a financial analyst is that it 14 should start on one of those two dates. If I'm 15 instructed later that it's a different date, I can 16 easily do the calculation for a different date. 17 Q. Were you instructed to start on these two 18 dates, or did you, yourself, pick these two dates? 19 A. I picked these dates. 20 Q. Now, let's look at the statutory language 21 then, because you did pick the dates by reference 22 to the statutory language. 23 A. Yes. 24 Q. And in particular, the start date under 25 the PSLRA is the -- well, the bounce-back period --</p>
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<p>1 Q. Okay. So let me call your attention to 2 the Paragraph 284 of your report. And here you 3 quote the statutory language that people typically 4 refer to as the bounce-back period, correct? 5 A. Correct. 6 Q. Are you offering an opinion in this case 7 as to what's the proper date for calculation of the 8 bounce-back period is -- what the proper start date 9 is? 10 A. I believe it's one of two dates, but I 11 don't know which one it is, according to the law. 12 Q. So you do -- I know you do report two 13 separate figures here: One based on February the 14 8th, and the other based on August the 5th, I 15 believe? 16 Does that sound right? 17 A. That sounds right, yes. 18 Q. You are opining -- you are offering an 19 opinion as an expert that one of those two dates is 20 the proper start date under this statutory 21 language? 22 A. Yes. 23 Q. Okay. So the PSLRA defines the start date 24 as -- 25 A. Well, let me back up. I mean, if you mean</p>	<p>1 strike that. 2 Under the PSLRA, as you have been quoted 3 here, the bounce-back period is the period, 4 "beginning immediately after dissemination of 5 information correcting the misstatement or 6 omission, and ending on the date on which the 7 Plaintiff sells or repurchases the security." 8 Do you see that? 9 A. Right. 10 Q. And that period is capped by 90 days; is 11 that correct? 12 A. That's right. 13 Q. And I want to focus now on the beginning 14 date, which is the date the -- the date of 15 dissemination of information correcting the 16 misstatement or omission. 17 Before you had called our attention to 18 Paragraph 45 about information that you state were 19 not disclosed prior to February 6, 2001. 20 Do you recall that? 21 A. Yes. 22 Q. All of the information in that Paragraph 23 45 had been disclosed before August of 2001, 24 correct? 25 A. Before when?</p>

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<p>1 Q. August of 2001.</p> <p>2 A. Yes.</p> <p>3 Q. And all of that information was, in fact,</p> <p>4 disclosed on February the 6th, although you say it</p> <p>5 takes some time to digest -- or it took some time</p> <p>6 to digest for the market; is that correct?</p> <p>7 A. The information -- the data was made</p> <p>8 available, that's right.</p> <p>9 Q. The data was made available specifically</p> <p>10 on the morning of February the 6th, correct?</p> <p>11 A. Well, we talked about this earlier.</p> <p>12 There's some evidence that it was the 7th. And</p> <p>13 there's some evidence that we're not entirely sure</p> <p>14 when it was. But I think on -- on balance, it</p> <p>15 looks like it was on the morning of the 6th.</p> <p>16 Q. And that's, in part, because of the</p> <p>17 Bloomberg article stamped, I think, 10 a.m. the</p> <p>18 morning of the 6th that's discussing and providing</p> <p>19 a link to the FDA material; is that correct?</p> <p>20 A. Yes.</p> <p>21 Q. Were any of the information you list here</p> <p>22 in Paragraph 45 disclosed for the first time in</p> <p>23 August?</p> <p>24 A. No, it was different information that was</p> <p>25 disclosed in August.</p>	<p>1 probably meant to ask the question might be no.</p> <p>2 But I think the way -- the way you asked it, I have</p> <p>3 to say, yes, there was information about the CLASS</p> <p>4 study that was disclosed for the first time in the</p> <p>5 Washington Post expose.</p> <p>6 Q. Was your information about the results of</p> <p>7 the CLASS study that was corrected or disclosed for</p> <p>8 the first time in -- in the August article?</p> <p>9 A. Same answer. Yes.</p> <p>10 Q. What about the results wasn't previously</p> <p>11 known to the market before?</p> <p>12 A. That Doctor Wolfe, who wrote the</p> <p>13 editorial, did not have the full results; that</p> <p>14 information about the results was not available</p> <p>15 prior to August 5th, 2001.</p> <p>16 Q. So do you want to change your --</p> <p>17 A. And there may be more, but that's an</p> <p>18 example of the type of information that came to</p> <p>19 light on August 5th, 2001.</p> <p>20 Q. Do you want to change your prior answer to</p> <p>21 the question whether you agree with the statement</p> <p>22 in your report that, quote, "The results of the</p> <p>23 complete CLASS study had been released to the</p> <p>24 market six months earlier, along with the FDA</p> <p>25 advisory committee report," end quote?</p>
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<p>1 Q. Was there any information disclosed in</p> <p>2 August correcting a misstatement that had</p> <p>3 previously been made?</p> <p>4 MR. SAHAM: I object to the extent it</p> <p>5 calls for a legal conclusion.</p> <p>6 A. (Witness reviews document.) It -- the</p> <p>7 information released on August 5th corrected</p> <p>8 omissions and -- and misleading statements. Mostly</p> <p>9 omissions, rather than affirmative statements, is</p> <p>10 my understanding.</p> <p>11 Q. What prior omission was corrected on that</p> <p>12 day?</p> <p>13 A. How the JAMA article came about. That,</p> <p>14 according to -- well, leave it at that. How the</p> <p>15 JAMA article came about.</p> <p>16 Q. Was there any omission about the results</p> <p>17 of the CLASS study that was disclosed for the first</p> <p>18 time -- well, strike that.</p> <p>19 Was there any omission about the results</p> <p>20 of the CLASS study that was corrected for the first</p> <p>21 time in August of 2001?</p> <p>22 MR. SAHAM: Objection. Asked and</p> <p>23 answered.</p> <p>24 A. Well, I think -- if I take your question</p> <p>25 literally, the answer is yes. I think the way you</p>	<p>1 A. That's true.</p> <p>2 MR. SAHAM: Objection. Misstates</p> <p>3 testimony. Assumes facts not in evidence.</p> <p>4 A. That's true. What you just read is true</p> <p>5 and correct, and I stand by it.</p> <p>6 But the fact that all that information was</p> <p>7 not available to Doctor Wolfe, that was not known</p> <p>8 until August 5th, 2001.</p> <p>9 Q. But the results of the complete CLASS</p> <p>10 study had been disseminated to the market six</p> <p>11 months before August of 2001; is that correct?</p> <p>12 A. The results of the study were, but what</p> <p>13 the JAMA editors and editorial writer knew about it</p> <p>14 at the time they wrote -- at the time the article</p> <p>15 was accepted and the editorial was written, that</p> <p>16 was not yet known by the marketplace.</p> <p>17 To what extent the JAMA article truly</p> <p>18 validated the study and the results as presented in</p> <p>19 the JAMA article -- rather -- that were produced by</p> <p>20 the study, that -- that was not yet known</p> <p>21 correctly.</p> <p>22 Q. And in the interim -- that is, between</p> <p>23 February 2001 and August 2001 -- the market had</p> <p>24 already fully revalued Pharmacia stock to reflect</p> <p>25 the negative economic impact of the CLASS results.</p>

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<p style="text-align: right;">Page 258</p> <p>1 Would you agree with that statement?</p> <p>2 A. That's right.</p> <p>3 Q. Was it --</p> <p>4 A. I mean, I should say that, as of this</p> <p>5 juncture, I haven't been able to conclude that</p> <p>6 there was -- there was any additional inflation in</p> <p>7 the price or any additional inflation dissipation</p> <p>8 subsequent.</p> <p>9 I mean, we know that there's a stock price</p> <p>10 slide between February and August. But at this</p> <p>11 juncture, given the analysis that I did do, I</p> <p>12 haven't been able to, with confidence, attribute</p> <p>13 any of that to these disclosures.</p> <p>14 Q. Now, let's go back to February and focus</p> <p>15 on the other date you used, February the 8th.</p> <p>16 Was there any information disclosed on</p> <p>17 February the 8th which corrected prior</p> <p>18 misstatements or omissions, as alleged in this</p> <p>19 case?</p> <p>20 MR. SAHAM: Could you read that back,</p> <p>21 please.</p> <p>22 (Question read back.)</p> <p>23 MR. SAHAM: Objection to form.</p> <p>24 A. There was analysis and interpretation of</p> <p>25 previously-disclosed data that took place on the</p>	<p style="text-align: right;">Page 260</p> <p>1 book, which still argued for informed censoring,</p> <p>2 and tried to make the case for six-month data, and</p> <p>3 a presentation at a Merrill Lynch conference by the</p> <p>4 president of the company -- of Pharmacia -- in</p> <p>5 which the JAMA article and six-month results were</p> <p>6 still being touted as correct and --</p> <p>7 Q. Okay. So what --</p> <p>8 A. -- fully representative.</p> <p>9 Q. Sorry. Were you finished?</p> <p>10 A. I'm now done.</p> <p>11 Q. Let me begin with the briefing book.</p> <p>12 Do you contend there are false or</p> <p>13 misleading statements in the briefing book?</p> <p>14 A. Could I have a look at it?</p> <p>15 Q. Sure.</p> <p>16 A. (Witness reviews document.) Well, I -- I</p> <p>17 know that the FDA reviewers rejected these</p> <p>18 arguments that are presented in this briefing book</p> <p>19 out of hand. So to the extent -- I mean, so that</p> <p>20 indicates that they just -- that they were</p> <p>21 misleading. They were false.</p> <p>22 I mean, trying to continue to make this</p> <p>23 case for the way the data was originally presented</p> <p>24 at -- at this juncture was -- was misleading and</p> <p>25 confusing to the -- to the marketplace.</p>
<p style="text-align: right;">Page 259</p> <p>1 8th and that was disseminated to the marketplace.</p> <p>2 What do you call -- you know, whether</p> <p>3 that's formally called a disclosure or not, again,</p> <p>4 may be a legal determination.</p> <p>5 Q. Was there any new fact disclosed to the</p> <p>6 market on that date, February the 8th?</p> <p>7 A. Well, that what analysts had to say about</p> <p>8 the prior data was disclosed. Those are facts that</p> <p>9 the market learned.</p> <p>10 Q. Any facts about the results of the CLASS</p> <p>11 study disclosed on February the 8th?</p> <p>12 A. I don't believe there were any new facts</p> <p>13 about the CLASS study, except for interpretation</p> <p>14 and dissemination about it that were in those</p> <p>15 analyst reports.</p> <p>16 Q. Were there any new facts about the results</p> <p>17 of the CLASS study disclosed on February the 7th</p> <p>18 for the first time?</p> <p>19 A. Again, it was interpretation and analysis</p> <p>20 of the data that had been made available --</p> <p>21 although confounded -- but made available the day</p> <p>22 before, because what happened on the 7th.</p> <p>23 Q. And by "confounded," what are you</p> <p>24 referring to?</p> <p>25 A. The company's or Defendants' briefing</p>	<p style="text-align: right;">Page 261</p> <p>1 Q. The fact that FDA reviewers rejected the</p> <p>2 data, in your view, indicates that they thought the</p> <p>3 data in the briefing report was misleading and</p> <p>4 false?</p> <p>5 Is that what you're saying? Or do I have</p> <p>6 that wrong?</p> <p>7 A. I -- well, as I sit here right now, I'm</p> <p>8 having trouble remembering. I mean, I know that it</p> <p>9 was confounding. I know that it was confusing that</p> <p>10 there would be a briefing book still arguing for</p> <p>11 data that the -- and for a way of looking at the</p> <p>12 data -- that the FDA rejected unanimously and that</p> <p>13 leaders in the field of analyzing medical research</p> <p>14 determined was just inappropriate.</p> <p>15 So you know, presenting this kind of</p> <p>16 information at that time, in conjunction with the</p> <p>17 other documents that were presented, is -- was</p> <p>18 confounding and confusing. I -- I -- you know, at</p> <p>19 an earlier hour, I might have been able to -- to</p> <p>20 tell you more precisely if there was anything</p> <p>21 specifically false, but its existence, trying to</p> <p>22 make the case for, essentially, a lost cause, it</p> <p>23 was certainly confounding.</p> <p>24 Q. Whose decision was it to -- to make</p> <p>25 available the briefing document on that day?</p>

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<p style="text-align: right;">Page 262</p> <p>1 A. I don't know.</p> <p>2 Q. Do you know whether the FDA decides that</p> <p>3 -- or the company on an individual basis?</p> <p>4 MR. SAHAM: Objection. Calls for</p> <p>5 speculation.</p> <p>6 A. Well, it doesn't really matter. It was</p> <p>7 made available. It was posted.</p> <p>8 Q. Do you know who decides whether to make</p> <p>9 the information available?</p> <p>10 A. I don't.</p> <p>11 Q. You're saying in this instance the market</p> <p>12 would have functioned more efficiently had there</p> <p>13 been less information in the market?</p> <p>14 Is that your testimony?</p> <p>15 MR. SAHAM: Objection. Misstates prior</p> <p>16 testimony.</p> <p>17 A. Without this confounder, it -- you know,</p> <p>18 based on economic theory, the information would</p> <p>19 have been digested more quickly. That's what a</p> <p>20 confounder is -- something that slows the</p> <p>21 efficiency, slows the efficient incorporation of --</p> <p>22 of data.</p> <p>23 Q. How much more quickly?</p> <p>24 A. I don't know. I can tell you what did</p> <p>25 happen. I can't speculate about what might have</p>	<p style="text-align: right;">Page 264</p> <p>1 presentation notes, suggesting that there was a</p> <p>2 study in which the GI safety of -- of Celebrex</p> <p>3 appeared to be superior to traditional NSAIDs is</p> <p>4 misleading.</p> <p>5 A full -- a nonmisleading presentation</p> <p>6 would have presented the additional information --</p> <p>7 even on this late date -- would have presented the</p> <p>8 additional information that diclofenac was not beat</p> <p>9 by Celebrex on any of the measures in a</p> <p>10 statistically significant fashion; that diclofenac</p> <p>11 actually was superior on -- on at least one</p> <p>12 measure; that when you go from six months of data</p> <p>13 to -- which was all that was in the JAMA article --</p> <p>14 to at least to the 12 months of data -- or the full</p> <p>15 dataset -- the primary end point result flips from</p> <p>16 being significant -- primary end point result with</p> <p>17 removing nonaspirin and combining the comparators</p> <p>18 goes from significant to nonsignificant; and that,</p> <p>19 in general, over the full time period -- over the</p> <p>20 full dataset, Celebrex appeared far worse than it</p> <p>21 did over the six months that was presented in the</p> <p>22 JAMA article, that's just misleading.</p> <p>23 Q. So you're saying that --</p> <p>24 A. I mean, to say that JAMA -- you know, to</p> <p>25 highlight that -- that the study results were in</p>
<p style="text-align: right;">Page 263</p> <p>1 happened.</p> <p>2 I just know that, based on economic</p> <p>3 theory, this slowed the absorption of the</p> <p>4 information into the marketplace.</p> <p>5 Q. By how much?</p> <p>6 A. I can't tell you that. I can tell you</p> <p>7 what did happen and how much, ultimately, the two</p> <p>8 confounders and the complexity and voluminous</p> <p>9 nature of the data slowed the incorporation. That</p> <p>10 was through February 8th.</p> <p>11 Q. But can you --</p> <p>12 A. But -- but to parse it out based on which</p> <p>13 document -- I can't -- I haven't done that.</p> <p>14 Q. And the Merrill Lynch -- the Merrill Lynch</p> <p>15 presentation that you referred to --</p> <p>16 A. Right.</p> <p>17 Q. -- what do you claim to be false in that</p> <p>18 document?</p> <p>19 A. I think I have some notes from that here.</p> <p>20 (Witness reviews document.) It's misleading. I</p> <p>21 mean, because we know that the data, as presented</p> <p>22 in the JAMA article, was incomplete, and,</p> <p>23 therefore, misleading. To continue to parade the</p> <p>24 JAMA article in front of investors and analysts, as</p> <p>25 it's done in this presentation, according to these</p>	<p style="text-align: right;">Page 265</p> <p>1 JAMA, and the JAMA article itself was misleading is</p> <p>2 misleading.</p> <p>3 Q. All the information you just described was</p> <p>4 disclosed on February the 6th; isn't that true?</p> <p>5 A. But that's the whole point of a</p> <p>6 confounder. The same time that the data is being</p> <p>7 posted, you've got someone standing up, still</p> <p>8 highlighting a study that has conclusions that are</p> <p>9 contrary to that new data.</p> <p>10 That's why people were confused; and</p> <p>11 that's why it took the market longer to process</p> <p>12 this information than it would have if there was a</p> <p>13 clear, consistent message.</p> <p>14 Q. Name one person that was confused.</p> <p>15 MR. SAHAM: Objection. To form.</p> <p>16 Q. Name one person who said they were</p> <p>17 confused by reviewing the disclosures made on</p> <p>18 February the 6th.</p> <p>19 A. Anthony Fiorino.</p> <p>20 Q. Okay. Anyone else?</p> <p>21 A. You know, I jumped the hurdle. You said</p> <p>22 "Name one person," and I named him. He wrote in</p> <p>23 his report that he thought the data was thorny. He</p> <p>24 was confused. He didn't come out and say that he</p> <p>25 understood that the vote was an inevitability,</p>

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<p style="text-align: right;">Page 266</p> <p>1 which was a correct conclusion, based on the nature 2 of the data. 3 He said it was thorny. He was withholding 4 his judgment about the data, because he did not 5 know at that point in time, apparently, from the 6 report that he wrote. 7 Q. Well, apparently, we'll find out, if your 8 counsel so cares to ask him. 9 But can you name anyone else which is a 10 second hurdle? 11 A. I probably could. I probably could. 12 Q. Go ahead. 13 A. All right. (Witness reviews document.) 14 Q. And you're flipping through your report 15 again; is that correct? 16 A. Because I have citations from analysts 17 here with -- with representative excerpts about 18 what their thinking was at various points in time. 19 So this is a good document. I'm not going to rely 20 on just my memory. We need to rely on 21 documentation. 22 Q. Given the widespread confusion, you should 23 be able to come up with lots of examples, right? 24 MR. SAHAM: Objection. Argumentative. 25 Objection. Form. Compound. There's multiple</p>	<p style="text-align: right;">Page 268</p> <p>1 his team, 'cause, by the way, he didn't author that 2 report individually. It was a team report. And if 3 the team put their name on it, stating that it was 4 a -- it was thorny, that the issues were thornier 5 than they had previously anticipated, it stands to 6 reason that -- that the members of the team -- not 7 just him individually -- found it -- found the 8 difficulty -- the issues confusing and thorny. 9 But beyond the multiple members of his 10 team that were apparently confused, and -- and 11 expressed that in their report, other analysis I 12 have done, and on the basis of just basic economic 13 principles of -- of how information is processed by 14 the marketplace -- leads me to the conclusion -- 15 the obvious conclusion that conflicting information 16 is received and is confusing. Conflicting 17 information is confusing. 18 I mean, not only -- we have to keep in 19 mind that, not only was the disclosure confounded 20 and conflicting with two disclosures the same day, 21 but it was conflicting with representations in a 22 campaign of, essentially, misinformation that had 23 been taking place over the prior 10 months. 24 So I think it was only natural for 25 investors and analysts in the marketplace to be</p>
<p style="text-align: right;">Page 267</p> <p>1 questions now pending. 2 Q. Was there widespread confusion in the 3 market? 4 A. I believe the market had not yet fully 5 appreciated the meaning of these conflicting data 6 that were presented that day -- 7 Q. And -- 8 A. -- on that day. I mean, do you want me to 9 answer that earlier question, or should we skip it? 10 Q. Yeah. No. Why don't you do it. 11 MR. SAHAM: Well, why don't you ask the 12 question, then he can answer it, because you've 13 moved on to several other questions. 14 Q. Can you give me -- can you give me an 15 example of someone who said they were confused by 16 the disclosures of February 6th? 17 A. Using exactly those words "confused," or 18 someone who's -- who had uncertainty -- now greater 19 uncertainty about what it all meant? 20 Q. No, someone who said, in substance or in 21 actual words, that they were confused by the 22 disclosures of February the 6th. 23 A. Well -- (witness reviews document.) 24 Well, I was able to remember specifically 25 the Anthony Fiorino comment -- or the comment of</p>	<p style="text-align: right;">Page 269</p> <p>1 somewhat confused by the way the information came 2 out. 3 Q. But you still can't point to anyone else 4 who says they were confused by all that? 5 A. Well, if you'd like me to -- let me see 6 the Fiorino report that he wrote on February 7th. 7 MR. SAHAM: Objection. Misstates prior 8 testimony. 9 Q. Can you point to anyone else besides, 10 supposedly, Fiorino and his team? 11 A. I mean, all right. Let the record show 12 that I've cited several people at this point; and I 13 can tell you, at this late stage, I don't -- 14 although I do have, I believe, pretty good command 15 over what's in the analyst reports, I just can't 16 remember the names of the analysts who -- who may 17 have expressed that kind of confusion in substance 18 or -- or explicitly. 19 Q. And the record will reflect how long 20 exactly you looked, but you can't answer that 21 question? You can't identify anyone else, 22 notwithstanding reviewing your report for about 23 five minutes? 24 MR. SAHAM: Well, do you want him to spend 25 more time? It's up to you. If you want to say</p>

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<p style="text-align: right;">Page 270</p> <p>1 five minutes was it, or do you want him to continue 2 to review his rebuttal report and other -- 3 MR. WANG: I want him to confirm that, 4 having reviewed the report for approximately five 5 minutes, he still can't identify anyone else. 6 A. Who -- who said specifically they were 7 confused? That -- yeah, I'll -- I'll agree to 8 that. 9 Q. Now, I think somewhere in -- in your 10 recent testimony -- and probably before too -- 11 you've said that the market should have or perhaps 12 would have expected -- strike that. Let me just 13 ask a question. 14 Had the full CLASS data been made 15 available to the market earlier, is it your opinion 16 that the February 7th recommendation against the 17 weight -- label change would have been predicted by 18 the market? 19 A. Yes. And the way we know that is a number 20 of ways: We know that by the unanimity of the 21 vote. We know that by the strong language in the 22 reviewer reports that say, in no uncertain terms, 23 there's just no support here for a GI superiority 24 of Celebrex. We know that from looking at the 25 intraday stock price chart on February 7th, where</p>	<p style="text-align: right;">Page 272</p> <p>1 prior testimony. 2 A. By the meaningful label change that had 3 been hoped for by the company. The meaningful 4 label change that was discussed and described when 5 the company first planned the Celebrex study. 6 Q. So the label change that actually happened 7 is not meaningful, in your view. 8 A. I didn't say that. I never said that. 9 Q. Did the CLASS data provide a basis for the 10 label change that actually happened? 11 A. The label change that ultimately happened? 12 Q. Correct. 13 A. So we're talking about a difference from 14 the label change that was -- that was discussed and 15 described in the original planning documents. 16 Q. No, I don't agree with that, but -- but 17 that's fine. 18 MR. SAHAM: And again, if you're -- if 19 you're going to ask him change -- if you want to 20 show him the new label, or whatever label you're 21 referring to, I think it's only fair to show him 22 that when you're asking him questions about whether 23 those changes are meaningful. 24 I mean, if you're not going to show him 25 the document, that seems unfair.</p>
<p style="text-align: right;">Page 271</p> <p>1 we see a large drop occurring even before the veto 2 occurred. 3 I mean, there's a lot -- we know that from 4 looking at company documents going back to April of 5 2000, where people very close to the data -- very 6 close to the study are lamenting that the study was 7 going to -- would -- would fail to support a -- a 8 label change. 9 I mean, that's a lot of evidence; and I 10 don't see any conflicting that -- that suggests 11 inevitability of that vote. 12 Q. So you're saying that it's inevitable 13 there would be no label change on February the 7th, 14 given the CLASS data. 15 A. Is that how you want -- 16 MR. SAHAM: Objection. Misstates prior 17 testimony. 18 A. That's how you want to word the question? 19 That's not -- 20 Q. Well, I'll restate it if you want, which 21 is, based on the complete -- the CLASS data, you're 22 saying -- had it been known to everyone -- would 23 have made clear that there is no basis for a label 24 change. 25 MR. SAHAM: Objection to form. Misstates</p>	<p style="text-align: right;">Page 273</p> <p>1 A. It's not the label change that they had 2 initially wanted. It's not the label change that 3 analysts were discussing prior -- in their analyst 4 reports prior to the February meeting. 5 Q. Did the CLASS data support any label 6 change? 7 A. Well, I believe the label change that did 8 occur referenced CLASS data. So to that extent, 9 you can say yes. But it's not what they were 10 hoping for. 11 Q. And investors -- 12 A. It's not what they had envisioned as an 13 outcome and goal of the CLASS study from the early 14 planning stages forward. 15 Q. So investors would have understood, had 16 they had all of the data in April of 2000, that a 17 label change should have been expected from the 18 CLASS data, correct? 19 MR. SAHAM: Objection to form. Misstates 20 prior testimony. 21 A. A label? 22 Q. Correct, a label change. 23 A. Any label change? I don't know. 24 Q. A label change relating to 25 gastrointestinal.</p>

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<p>1 A. I can tell you that the label change that 2 was considered at the February meeting, that label 3 change would have been known to have been 4 unsupported. The market would have known that it 5 was unsupported by the CLASS, just as company 6 insiders knew and expressed it in writing in 7 documents that we have here. 8 Q. So what label change did the market 9 expect, exactly, coming into the February 7th 10 meeting? 11 MR. SAHAM: Objection to form. 12 A. That's already in the record. We've 13 already talked about this. 14 MR. SAHAM: Asked and answered. 15 A. You asked the same question, so I'll just 16 refer to the same answer. 17 Q. What was the label change that was 18 expected as of February the 7th? 19 A. Well, let's -- you know, there's a false 20 premise in your statement. 21 When you say, "expected --" 22 Q. Strike that. 23 A. -- do you mean expected with a hundred 24 percent confidence? 90 percent confidence? 51 25 percent confidence? What do you mean by</p>	<p>1 (Feinstein 1006, document, 6/7/2002.) 2 Q. Have you seen this document before? 3 A. Is there a date on it somewhere that you 4 could show me? That would help me answer your 5 question. 6 Q. It's on the final page, with the 7 electronic signature. 8 A. June 7th, 2002. I've seen reference to 9 it. I've seen a lot of references to it, but I 10 haven't seen this document. 11 And I'm not done reading it. (Witness 12 reviews document.) Okay. 13 Q. Your is -- was this label change 14 meaningful? 15 A. This was not the meaningful label change 16 that had been hoped for by the company initially. 17 Q. Was it meaningful? 18 MR. SAHAM: Objection to form. Vague as 19 to "meaningful." 20 A. (Witness reviews document.) I mean, there 21 -- I mean, I can -- I can point out some of the 22 elements. 23 MR. SAHAM: I want to make -- meaningful 24 to whom? I mean, go ahead. You can answer. I'm 25 sorry.</p>
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<p>1 "expected"? 2 Q. Well, you've used the term. 3 How have you used the term here? 4 MR. SAHAM: Objection to form. 5 A. What I said is that there was undue 6 optimism about a label change. The -- there was -- 7 the optimism was there, but it was undue because of 8 the -- it would have been known to have been undue 9 had the market known about what was being concealed 10 -- the results that were not presented to the 11 marketplace from the CLASS study. 12 The label change that was being discussed 13 in the application, in analyst reports by the 14 company in the -- in its planning documents was for 15 the label change that would have meaningfully 16 differentiated Celebrex from traditional NSAIDs on 17 the basis of GI safety. 18 In fact, that was the whole reason 19 Celebrex was engineered in the first place. They 20 were hoping that this was going to confirm and 21 validate that this whole project was working. 22 That has not ultimately what they ended up 23 with. 24 Q. All right. Well, let me give you the -- 25 the label change that they ended up with.</p>	<p>1 A. Yeah. Can you tell me, meaningful to 2 whom? 3 Q. Well, is it meaningful, in your view? 4 MR. SAHAM: Objection to form. Vague as 5 to "meaningful." 6 A. I mean, it's a -- I would say it's not the 7 meaningful change, and it's not as meaningful as 8 what they had hoped for. But it's not -- the data 9 about the CLASS study that's included here, 10 although some of it's rather negative, you must 11 admit -- for Celebrex -- is of interest, I'm sure, 12 to prescribers, and payers, and patients. 13 Q. And do you -- is the warning label change 14 on GI in particular meaningful to investors? 15 MR. SAHAM: Same objection. Vague as to 16 "meaningful." 17 To whom? 18 A. Well, we see the -- (witness reviews 19 document.) I lost the place I had. 20 I mean, the "extreme caution" language 21 about prescribing NSAIDs in the warning section I 22 understand is what the company had really hoped to 23 have modified more significantly than what may be 24 modified here. 25 I mean, it says on Page 11, "NSAIDs should</p>

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<p style="text-align: right;">Page 278</p> <p>1 be prescribed with extreme caution in patients with 2 a prior history of ulcer disease or 3 gastrointestinal bleeding. Most spontaneous 4 reports of fatal GI events are in elderly or 5 debilitated patients, and, therefore, special care 6 should be taken in treating this population. To 7 minimize the potential risk for an adverse GI 8 event, the lowest effective dose should be used for 9 the shortest possible duration. For high-risk 10 patients, alternative therapies that do not involve 11 NSAIDs should be considered." 12 I know from everything that I've read in 13 this case that the company really wanted to be able 14 to say that Celebrex is not like the other NSAIDs 15 with that regard -- in that regard. 16 Q. So is your testimony this is meaningful or 17 not? 18 A. Well, there's some meaning here, but it's 19 not as meaningful as what they had hoped for. It's 20 not -- it's not as significant; it's not as 21 valuation important as what they had hoped for. 22 I mean, the company's own planning 23 documents laid out what they were looking for. 24 This isn't it. 25 Q. The FDA agreed to a label change based on</p>	<p style="text-align: right;">Page 280</p> <p>1 meaningful? 2 A. (Witness reviews document.) I'm sure it 3 has importance to some payers, patients, and 4 prescribers, but the one that they were really 5 looking for, they didn't get. 6 Q. And you're an expert in the area of what's 7 meaningful or not in terms of label changes? 8 A. Well, I read -- 9 MR. SAHAM: Well, wait. Wait. Wait. 10 Wait. Objection to form. Misstates prior 11 testimony. And still vague and ambiguous with 12 respect to "meaningful." 13 A. I'm an expert in financial analysis. I'm 14 an expert in reading and understanding -- reading 15 analyst reports. I'm an expert in analyzing 16 companies. I'm an expert in interpreting 17 information that's value relevant for companies. 18 And so -- so with respect to this 19 particular case, this information was what a 20 qualified financial analyst -- myself being one -- 21 would focus on. 22 So I do understand how to read this stuff. 23 And I -- I can tell you what it means. And I can 24 tell you degrees of valuation impact that this 25 language has.</p>
<p style="text-align: right;">Page 279</p> <p>1 the CLASS data, correct? 2 A. They included CLASS data in this label 3 change, yes. But it's not the label change that 4 we've been discussing all day. 5 Q. But it is a label change? 6 A. Yeah. 7 Q. And it's a meaningful label change? 8 MR. SAHAM: Objection to form. Vague as 9 to "meaningful." 10 Meaningful to whom? 11 Q. Meaningful in the same sense you've used 12 it about 20 times during this deposition. 13 A. Well, all right. Let's define 14 "meaningful" then, is that what you're -- I mean, 15 the section that I read, the company wanted that 16 language to reflect that Celebrex was not like the 17 traditional NSAIDs in that regard. That's what the 18 company wanted. They didn't get it. If that's 19 what you mean by "meaningful," then this is not 20 meaningful. 21 There might be other meaningful elements 22 to the label change, but with respect to that 23 warning, they didn't get what they wanted. 24 Q. Was the -- the warning label change at the 25 bottom of Page 9 continuing on to Page 10</p>	<p style="text-align: right;">Page 281</p> <p>1 This is not as valuation positive as the 2 label change that they were seeking. 3 Q. Is it as valuation positive as -- relative 4 to if there had not been any label change? 5 MR. SAHAM: Objection to form. As to 6 "this," what are you referring to? 7 A. Yeah. Can you clarify what you mean by 8 "this." 9 Q. I haven't used the word "this." 10 THE WITNESS: Then let me hear the 11 question again, please. 12 (Question read back.) 13 MR. SAHAM: Objection to form. Vague and 14 ambiguous. 15 A. It's hard to say. I didn't do a 16 quantitative analysis on what happened after the 17 CLASS -- you know, this far after the class period. 18 I didn't do an event study on -- when -- when these 19 developments occurred. So I can't tell you whether 20 it had a significant impact on the stock price. 21 My understanding is the company sought to 22 salvage something from the CLASS study and get 23 something into the label. I don't know if that was 24 just for saving face, or if they really thought 25 that there was a commercial value to doing such.</p>

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<p style="text-align: right;">Page 282</p> <p>1 My understanding also is that what 2 eventually happened was they agreed -- in 3 negotiation with the FDA -- to put some data into 4 the label and let other people decide whether it -- 5 whether it warranted use of Celebrex, rather than 6 traditional NSAIDs. 7 Q. Based on the disclosures that were made by 8 February the 6th and on February the 6th, did the 9 market predict and expect that there would be a 10 label change? 11 A. Any label change? 12 Q. This label change. 13 A. This label change. I don't think they 14 were anticipating exactly this label change. 15 Q. Were they -- 16 A. I think they understood -- what they 17 understood is that the -- what they were -- what 18 they learned -- what they were -- over those three 19 days they came to understand is that the more 20 dramatic label change that was originally 21 envisioned was not going to be recommended. 22 Q. Okay. And then how about any label 23 change? 24 Did the market predict and expect that 25 there would be any label change after receipt of</p>	<p style="text-align: right;">Page 284</p> <p>1 Q. Did Merck get a substantively different 2 label change on Vioxx on GI than Pharmacia got in 3 this label change? 4 MR. SAHAM: Again, if you're referring to 5 a particular label, can you show it to him? 6 MR. WANG: I'm not referring to a 7 particular label. 8 Q. I'm just saying, generally speaking, did 9 Merck get a substantively different label change on 10 Vioxx -- on GI than Pharmacia got in this label 11 change? 12 A. Merck label is different from this label, 13 that's for sure. 14 Q. And -- and the substance -- and -- and you 15 referred earlier to the positive GI data released 16 on the morning of February the 7th, right? 17 A. The committee voted for granting Merck a 18 label change -- a label change -- in substance what 19 they had been -- what they requested. 20 Q. And was the label change any different 21 substantively than the label change here? 22 MR. SAHAM: Objection to -- to form. 23 Calls for speculation. 24 A. I -- I don't know what the ultimate label 25 was, 'cause remember, you know, in -- in this label</p>
<p style="text-align: right;">Page 283</p> <p>1 the February 6th information? 2 A. You know, the -- the data just -- the way 3 the news evolved and -- yeah. The way the news 4 evolved, it's -- I wasn't able to focus on that 5 question in -- in the event study. 6 Q. What information do you need to consider 7 to make that determination? 8 A. Well, what we have with respect to the 9 CLASS data is essentially controlled experiment. 10 We have a valuation for the company prior to the 11 February 6th posting of the data; and we have a 12 valuation of the company after February 8th, when 13 analysts disseminated their understandings of the 14 import of that information. 15 So we can see the market-based -- 16 market-revealed valuation impact of the 17 introduction of that data. 18 I -- I don't -- I did not run a study 19 where I was able to -- where I sought to identify 20 when the market first learned this would happen, 21 (indicating) and then test what the valuation was 22 before they learned that and compare it to what the 23 valuation was after they learned that. 24 I mean, this is all subsequent to the 25 CLASS period.</p>	<p style="text-align: right;">Page 285</p> <p>1 change process, there's a recommendation by an 2 advisory committee, and then there's approval by 3 the FDA, and then there's the actual drafting of 4 the label. 5 I can tell you that events of February 6 6th, 7th, and 8th, you know, in addition to some 7 bad news that came out about Vioxx, there was also 8 some countervailing good news that the committee 9 felt that their study warranted approval of their 10 request. 11 Q. Did the Vioxx label have the NSAID warning 12 that you -- you read removed? 13 A. I don't -- 14 MR. SAHAM: Objection to form. Calls for 15 speculation. 16 A. I don't recall. I mean, if you show me 17 the label, I'll -- that ultimately derived from 18 that regulatory process, I can answer the question 19 better. 20 Q. Have you -- strike that. 21 Do you know what the advisory committee's 22 recommendation on February the 8th was specifically 23 on Vioxx? 24 A. I read it. I understood it. 25 Q. And based on your reading and</p>

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<p style="text-align: right;">Page 286</p> <p>1 understanding of it, did Merck succeed in getting 2 the NSAID warning removed? 3 A. I don't recall. 4 MR. SAHAM: Object. Objection to form. 5 Calls for speculation. 6 A. I don't recall specifically. I know -- I 7 know it's easy to check. 8 Q. If it didn't, could it still have been a 9 meaningful change? 10 MR. SAHAM: Objection to form. Vague. 11 Calls for speculation. 12 A. I would just be speculating. I don't 13 know. I mean, it would be easier to answer the 14 question then if -- A, if it was relevant to the 15 analysis that I did -- which I don't believe it 16 is -- and B, if you gave me the documents. I have 17 -- I have read those documents, but if we had them 18 in front of me, I can answer that for you. 19 Q. Do you have any opinion on whether or not 20 the Merck label change was meaningful? 21 MR. SAHAM: Objection to the form. 22 A. With -- how it's relevant to my analysis 23 is that the mix of information for Merck on 24 February 8th was -- was clearly mixed, and -- and 25 not on net positive or negative. There was some</p>	<p style="text-align: right;">Page 288</p> <p>1 was mixed and did not have a statistically 2 significantly identifiable valuation impact on 3 Merck stock; and, therefore, the horse race theory 4 is not supported. 5 The Merck developments -- developments at 6 this other company are not what caused Pharmacia 7 stock price to move that day. That's the opinion I 8 formed. 9 Q. Did you form one as to the meaningfulness 10 of the label change of Vioxx? 11 A. No, I never did. 12 Q. Now, you said that there was 13 counterbalancing factors: The negative for Vioxx 14 CV data, and the positive GI data; is that -- is 15 that correct? 16 A. Not just the data, also the discussions 17 regarding it. 18 Q. Okay. The data -- but the discussions and 19 data concerning GI were positive -- or I think you 20 might have said "good" for Merck; is that -- is 21 that your testimony? 22 A. From their study, right -- 23 Q. How -- 24 A. -- versus one NSAID. 25 Q. How were the discussions and data good for</p>
<p style="text-align: right;">Page 287</p> <p>1 pretty negative stuff that came out about Vioxx and 2 was discussed about Vioxx that day. 3 But then there were FDA reviewers who 4 said, Look, you know, setting aside CV risks, we 5 set the bar at a certain place for them in 6 establishing what they wanted to establish with 7 respect to GI risks, and -- and their study leaped 8 that hurdle. So they -- they approved the request 9 for -- for label change. 10 I don't -- I don't remember specifically 11 -- and so there was good news and bad news. The CV 12 risk was bad. GI approval was good. Stock price 13 didn't move significantly one way or the other. 14 That's what's relevant to my study. 15 The details of the label change just 16 aren't relevant to making a determination about 17 what was moving -- well, what was moving 18 Pharmacia's price on that day, especially because 19 the actual drafting of the label wouldn't take 20 place for some days -- months later. 21 Q. So have you formed an opinion or not as to 22 whether or not Merck was allowed a meaningful label 23 change on Vioxx? 24 A. The opinion that I did form is that the 25 news on February 8th -- all things considered --</p>	<p style="text-align: right;">Page 289</p> <p>1 -- for Merck? 2 A. Well, the committee said that -- my 3 understanding is it was a less ambitious study than 4 -- than CLASS, but nonetheless, they had succeeded 5 in showing what they had set out to show; and so 6 they got a favorable vote from the FDA advisory 7 committee. 8 Q. What did the favorable vote allow Merck to 9 do? 10 A. I -- 11 MR. SAHAM: Objection to form. Calls for 12 speculation. 13 A. Well, it didn't allow Merck to do 14 anything. It allowed the -- I mean, it was a 15 recommendation to the FDA to allow -- to -- to 16 approve their application for a label change. 17 Q. Do you know anything about the details of 18 what label change would allow for Merck? 19 A. I know some details. We've gone over them 20 a number of times. I can't tell you all of them. 21 And I certainly probably can't tell you very many 22 of them without the document in front of me at this 23 juncture, sitting here right now at 5 o'clock -- 24 Q. Can you tell me -- 25 A. -- after a long day of deposition.</p>

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<p style="text-align: right;">Page 290</p> <p>1 Q. -- tell me any of them?</p> <p>2 MR. SAHAM: Objection to form. Calls for</p> <p>3 speculation. If you want to ask him what's in the</p> <p>4 label, it's only fair to put the label in front of</p> <p>5 him.</p> <p>6 A. I just don't recall. I read it. I -- I</p> <p>7 read every word in the transcript from the FDA</p> <p>8 deliberations that day. I just don't recall</p> <p>9 exactly -- well, you know, actually, it's coming</p> <p>10 back to me, you know, as I think about it. I read</p> <p>11 every word in that transcript.</p> <p>12 You know, they said it was -- essentially,</p> <p>13 the gist of it was that they were going to let</p> <p>14 Merck say something positive. It was something</p> <p>15 somewhat vague. They were going to let Merck say</p> <p>16 something positive, reflecting the positive outcome</p> <p>17 from the study.</p> <p>18 It -- as I recall now, it was more vague</p> <p>19 than specific about, you know, how positive and</p> <p>20 what positive they could say.</p> <p>21 Q. Now, you said the VIGOR study was less</p> <p>22 ambitious than CLASS.</p> <p>23 How so?</p> <p>24 A. Well, there was only one comparator, for</p> <p>25 example. That's really as far as I -- I'd be able</p>	<p style="text-align: right;">Page 292</p> <p>1 VIDEO OPERATOR: The time is 5:13. We are</p> <p>2 now back on the record.</p> <p>3 Q. Professor Feinstein, let me call your</p> <p>4 attention to Paragraph 34 of your report.</p> <p>5 MR. SAHAM: What paragraph was that? I'm</p> <p>6 sorry.</p> <p>7 MR. WANG: 34.</p> <p>8 MR. SAHAM: Thank you.</p> <p>9 Q. In this paragraph you state that Celebrex</p> <p>10 was "launched in early 1999 and comarketed with</p> <p>11 Pfizer."</p> <p>12 Do you see that?</p> <p>13 A. Yes.</p> <p>14 Q. And then in the next sentence you say,</p> <p>15 "The launch was highly successful," correct?</p> <p>16 A. Yes.</p> <p>17 Q. What do you mean by that?</p> <p>18 A. Oh. It was described in the press as</p> <p>19 being one of the most successful pharmaceutical</p> <p>20 launches ever. Just the speed, the rapidity of</p> <p>21 adoption by prescribers.</p> <p>22 Q. And do you agree with that description in</p> <p>23 the press?</p> <p>24 A. I have no reason not to. Yes. I mean,</p> <p>25 it's -- sales -- sales growth -- well, the -- in</p>
<p style="text-align: right;">Page 291</p> <p>1 to go at this point. There was one comparator</p> <p>2 instead of two comparators.</p> <p>3 Q. And what's the significance of that?</p> <p>4 A. Well, it would be hard to say, on the</p> <p>5 basis of one comparator, that you're better than</p> <p>6 all NSAIDs. So that might not have been -- well,</p> <p>7 leave it at that. If you beat all NSAIDs, you can</p> <p>8 say you're better than all NSAIDs.</p> <p>9 If you beat a lot of NSAIDs, you can say</p> <p>10 there's a good -- good chance you're better than</p> <p>11 all NSAIDs. If you only beat one, it's hard to say</p> <p>12 it. And I mean traditional NSAIDs when I say,</p> <p>13 "NSAIDs."</p> <p>14 The end points also -- GI events was</p> <p>15 measured differently, but I did -- at this moment,</p> <p>16 I couldn't articulate that for you with precision.</p> <p>17 MR. WANG: Why don't we take a break now.</p> <p>18 I think we need to change the tape.</p> <p>19 VIDEO OPERATOR: No, I changed the tape.</p> <p>20 I can take a break, though, if you want.</p> <p>21 MR. WANG: Why don't you, and tell me</p> <p>22 where we are.</p> <p>23 VIDEO OPERATOR: The time is 4:58, and</p> <p>24 we're off the record.</p> <p>25 (Recess was taken.)</p>	<p style="text-align: right;">Page 293</p> <p>1 this -- among analysts covering this industry, a</p> <p>2 blockbuster drug has a specific meaning.</p> <p>3 A blockbuster drug is a drug that has over</p> <p>4 a billion dollars of sales. And they reached</p> <p>5 blockbuster status immediately in the year of</p> <p>6 launch.</p> <p>7 Q. Celebrex sales totaled 1.4 billion in</p> <p>8 1999?</p> <p>9 A. Right. Usually it takes some time to</p> <p>10 penetrate a market. And this was a blockbuster in</p> <p>11 the first year of launch. So yes, it was highly</p> <p>12 successful.</p> <p>13 Q. And Celebrex was the most successful drug</p> <p>14 launch ever?</p> <p>15 A. As of that time, yes.</p> <p>16 Q. That's correct?</p> <p>17 A. At that time.</p> <p>18 Q. And --</p> <p>19 A. I mean, since then there may have been</p> <p>20 faster, more successful -- or more successful</p> <p>21 launches. But at the time, that was the most</p> <p>22 successful launch ever on those metrics.</p> <p>23 Q. Was the success of Celebrex's launch due</p> <p>24 in any part to the CLASS study?</p> <p>25 A. Well, I -- I don't think so, because the</p>

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<p>1 CLASS study -- the results had not been released 2 yet. 3 Q. So what is was the success due to then? 4 MR. SAHAM: Objection. Calls for 5 speculation. 6 A. Yeah, I -- I would be speculating. But I 7 can -- I can tell you some of the characteristics 8 or some of the things that were cited in analyst 9 reports, news articles, commentary by medical 10 professionals -- 11 Q. What -- 12 A. -- which might be related to that 13 question. 14 Q. Well, what's your understanding -- if you 15 have one -- of why Celebrex was the most successful 16 drug launch ever at the time? 17 A. Well, again, this is -- again, tangential 18 to the opinions I'm offering in this case. I don't 19 think it's at all relevant to the opinions offered 20 in this case, but I know that -- 21 Q. This paragraph's not relevant? 22 A. No. The answer to your question as to why 23 it was the most successful launch -- why the launch 24 was so successful. The fact that it was very 25 successful is extremely important to my opinion.</p>	<p>1 speculation. 2 A. I believe they thought it could. I mean, 3 it was engineered to have a better GI safety 4 profile. It was engineered -- I mean, it was an 5 engineered drug, which is also very high tech and a 6 very sort of a modern development in the history of 7 pharmaceutical development. It was engineered to 8 -- to serve a very specific chemical purpose; and 9 -- and analysts understood that. And they thought 10 that it could have that superior GI profile, but it 11 -- everyone knew that you couldn't just theorize 12 about safety. You had to prove it in a clinical 13 study. 14 Q. Right. And there wasn't just theory. 15 There were 14 studies supporting the New Drug 16 Application for Celebrex; isn't that correct? 17 A. My understanding is what was missing was a 18 long-term study. 19 Q. Do you have an understanding of whether 20 there was data supporting the GI superiority -- 21 A. Right. 22 Q. -- in the NDA? 23 A. I believe there were some. But what was 24 missing what was a long-term study. 25 Q. Do you have an opinion, one way or</p>
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<p>1 This drug was very important to -- to 2 Pharmacia, as a company. This drug represented a 3 large share of this company's sales. 4 Q. So do you have an understanding why it was 5 the most successful drug launch ever at the time? 6 A. Well, again, I could tell you some of the 7 -- some of the characteristics of the drug that -- 8 that made it attractive to prescribers and 9 patients, which I guess is related to -- to your 10 question. It was -- it was a great story. I mean, 11 it was -- you know, the story of -- of what this 12 drug worked, and why it should work, and why it 13 should be safer than traditional NSAIDs was easy to 14 understand by -- by prescribers and -- and 15 patients. 16 You know, that -- that there were two COX 17 enzymes; and one of them protects the stomach -- 18 although they both cause pain. And by inhibiting 19 COX-2, you can, perhaps -- you know, the story 20 was -- you know, maintain the protective features 21 but relieve pain and inflammation. 22 Q. The market had the view, even prior to the 23 CLASS study, that Celebrex had a superior GI 24 profile than traditional NSAIDs? 25 MR. SAHAM: Objection to form. Calls for</p>	<p>1 another, whether the market viewed Celebrex as 2 having a superior GI profile relative to 3 traditional NSAIDs? 4 A. In 1999? 5 Q. Yeah, or 2000. Prior to April of 2001 -- 6 2001 is what I'm focused on, actually. 7 MR. SAHAM: Objection to the form. 8 A. And when you say, "profile," you mean an 9 established profile proved but clinical data? 10 Q. No. Did the market have an expectation 11 and belief that Celebrex was less likely to cause 12 GI problems than traditional NSAIDs? 13 A. And by "the market," do you mean 14 prescribers, patients, payers, investors, or 15 analysts? 16 Q. Why don't we go one by one. Do you want 17 to start with prescribers or... 18 A. What was relevant to my report and my 19 analysis was that they did expect positive results 20 from the CLASS study, because they did believe that 21 there was a -- they had reason to believe that it 22 was safer. They had some reason to believe, based 23 on the theory and based on other evidence that was 24 available. 25 So going into the period of time when the</p>

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<p style="text-align: right;">Page 298</p> <p>1 CLASS study was announced -- rather, the results 2 were announced -- they did believe that there was 3 reason to believe that it was safer. 4 Q. Okay. 5 A. And that the CLASS study would confirm 6 that. 7 Q. So what about payers? The others you 8 listed, I think, were payers. 9 A. I think they needed more data. I think, 10 you know, payers needed more data, because it was 11 so much more expensive. 12 Q. What about patients? 13 A. I don't know. I can't speak for patients. 14 Q. Investors? 15 A. I think investors did believe that there 16 was reason to believe it was safer, and that the 17 CLASS data would confirm that safety. 18 Q. How about prior to April of 2000? 19 A. Yes, even prior. 20 Q. And what about analysts? 21 A. Same. 22 Q. Same as investors? 23 A. Yes. 24 Q. Celebrex, from the beginning, had a 25 warning label on GI that was more favorable than</p>	<p style="text-align: right;">Page 300</p> <p>1 definition, came out before there were statements 2 about the class period -- sorry -- about the CLASS 3 study in April of 2000, correct? 4 A. I did -- I didn't hear what you said. 5 Q. The -- (reviews screen.) Strike that. 6 The part of Pharmacia's valuation that was 7 premised upon the expectation of Celebrex having a 8 superior GI profile, that valuation was based on 9 the NDA; is that correct? 10 MR. SAHAM: Objection to form. Form and 11 foundation. Misstates prior testimony. 12 A. I don't know if it was based on the NDA 13 exclusively or even in part. 14 Q. What's your -- strike that. 15 Do you have an understanding of what -- 16 what the market's expectation of a superior GI 17 profile was prior to the class period? 18 A. Well, I -- it seems that -- well, yeah. I 19 mean, I base my opinion on analyst reports that 20 said that they expected good results from the CLASS 21 study. 22 Q. Even prior to the class period? 23 A. Pardon? 24 Q. Even prior to the class period? 25 A. Yes. And then it's not clear that they --</p>
<p style="text-align: right;">Page 299</p> <p>1 traditional NSAIDs, correct? 2 A. I don't -- 3 MR. SAHAM: Objection to form. Calls for 4 speculation. 5 A. I'd have to say I don't know. 6 MR. SAHAM: And assumes facts not in 7 evidence. 8 Q. But coming into the class period in April 9 of 2000, part of Pharmacia's valuation was built 10 upon the expectation that it could be shown to have 11 a GI profile superior to traditional NSAIDs, 12 correct? 13 MR. SAHAM: Could you repeat that. 14 MR. WANG: Sure. I'll restate it. 15 MR. SAHAM: Sorry. 16 Q. Coming into the class period -- or 17 immediately prior to the class period, Pharmacia's 18 valuation was premised, in part, upon the 19 expectation and belief that Celebrex had a superior 20 GI profile; is that correct? 21 A. I think the way you -- you phrased it is 22 fairly -- I don't have any objection to that. I 23 think that's right. 24 Q. And that superior GI profile -- or the 25 belief as to that was based on information that, by</p>	<p style="text-align: right;">Page 301</p> <p>1 it seems that the -- that the stock price was 2 maintained by the CLASS data -- rather, the CLASS 3 result announcement. 4 Q. Even prior to the CLASS announcement -- 5 and I think you're referring to the April 17th, 6 2000 disclosure? 7 A. Yes. 8 Q. Even prior to that, though, Celebrex was 9 already a very successful drug for -- for 10 Pharmacia; is that correct? 11 A. Yes. 12 Q. Did you undertake any study or analysis of 13 how much of Pharmacia's valuation was based on 14 Celebrex prior to the class period? 15 A. Well, I didn't do a calculation driving a 16 numerical answer, but as I described in the report, 17 you know, I've got analyst quotes, company quotes, 18 newspaper quotes that explain that it was 19 qualitatively extremely important to Celebrex -- to 20 Pharmacia. 21 I looked at the data on the percentage of 22 Pharmacia sales that were accounted for by 23 Celebrex, and it was substantial. And also I 24 looked at what portion of the company was 25 pharmaceuticals versus chemical and agriculture,</p>

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<p style="text-align: right;">Page 302</p> <p>1 and realized that, any way you cut it, Celebrex was 2 important to Pharmacia. 3 So you know, a numerical quantification? 4 No. Enough analysis to make the determination 5 qualitatively that it was extremely important? 6 Yes. 7 Q. And you understood that Celebrex was 8 extremely important to Pharmacia, even prior to 9 April 17th, 2000, correct? 10 A. Correct. Well, when you get -- then we -- 11 I just still want to add a footnote to my answer 12 that I hope you don't mean -- or I hope you're not 13 going to misconstrue my answer, in light of the 14 fact that there was a realignment of the ownership 15 structure of the drug, you know, among Searle, and 16 Monsanto, and Old Pharmacia, and New Pharmacia, and 17 Old Monsanto, and New Monsanto. You know, we all 18 understand that in April of 2000 the organization 19 of the company changed. 20 I mean, Pharma -- Celebrex was -- was 21 owned by Searle and Monsanto initially, and 22 essentially acquired by Pharmacia through the 23 merger. So I hope that's not where you're going to 24 suggest that my answer was incorrect in any way. 25 What I really mean to say is that</p>	<p style="text-align: right;">Page 304</p> <p>1 about this. 2 Q. So given the high expectations for the 3 drug already existing at the beginning of the class 4 period, what basis do you have for attributing the 5 so-called "artificial inflation" to the April 17th, 6 2000 disclosures, as opposed to preexisting 7 expectations? 8 A. Oh. It's a controlled experiment. When 9 the information about the -- I mean, we're able to 10 look at the change in valuation of the company, 11 comparing when the information is excluded from the 12 market, to the valuation when the information is 13 included in the market; and -- and we see that 14 that's \$5.92. 15 So you know, just -- just as Doctor Lane 16 says -- and actually, a number of academic and 17 practitioners' texts say that an event study on the 18 disclosure event is -- is a good way to measure the 19 importance of a particular piece of information. 20 I undertook that very same analysis and -- 21 and made the determination that, when the 22 misinformation entered the market, the stock was 23 inflated by \$5.92. 24 Q. But the inflation was already there prior 25 to April the 17th 2000, correct?</p>
<p style="text-align: right;">Page 303</p> <p>1 Pharmacia -- is that Celebrex is important to 2 whoever owns Celebrex. 3 Q. And the importance of Celebrex to whoever 4 owned Celebrex and -- and the valuation of 5 Pharmacia stock built into its stock price, both 6 those were already present when the April 17th, 7 2000 disclosures were made, right? 8 MR. SAHAM: Objection to form. Vague. 9 Vague as to time, since Pharmacia didn't own 10 Celebrex until I, believe, March 31st, 2000. 11 A. So I need to hear the question again. 12 Q. Well, let me just restate it differently. 13 The -- the high expectations and beliefs 14 about Celebrex already existed prior to April 17th 15 of 2000, correct? 16 A. Well -- 17 Q. They existed on April 16th, 2000? 18 A. Right. But just as I explain in my 19 report, the CLASS study was nonetheless extremely 20 important to the future -- the future prospects of 21 Celebrex, because it would allow for an 22 acceleration of sales growth. There'd be greater 23 justification for payers to allow coverage of a \$2 24 or \$3-a-pill drug, instead of a 2-cent or 25 3-cents-a-pill drug. And all the analysts talk</p>	<p style="text-align: right;">Page 305</p> <p>1 A. No, the stock price was what it was, but 2 had the news been complete on April 17th, 2001, the 3 stock price would have fallen. 4 So the misleading and false statements by 5 buoying up the stock price, keeping it from 6 falling -- just keeping it where it was -- actually 7 introduces inflation. 8 So let's be real clear. The stock price 9 roughly stayed the same, but the inflation went up 10 \$5.92, because had it -- but for the false and 11 misleading statements, the stock price would have 12 fallen that day. 13 And it's traceable. You know, you're 14 talking about how successful the sales are. Yeah. 15 The sales were successful. But the new information 16 would have indicated even better success. 17 Q. Well, the new information disclosed on or 18 soon after April 17th was that the CLASS study had 19 failed its primary end point, correct? 20 MR. SAHAM: Objection to form. Misstates 21 prior testimony. Form and foundation. And assumes 22 facts not in evidence. 23 THE WITNESS: Can I have the press release 24 there, please. 25 A. (Witness reviews document.) Got to admit,</p>

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<p style="text-align: right;">Page 306</p> <p>1 this is a very positive press release. It's 2 couched in very, very positive, glowing terms. 3 Q. What? 4 A. This is -- this is not a press release 5 that says, We failed, and things look bleak. 6 Q. Okay. But what -- 7 A. This is a press release that says that, 8 notwithstanding the fact that they missed the 9 primary end point, there are secondary end points 10 and a number of metrics that establish Celebrex as 11 being differentiated from traditional NSAIDs. 12 Specifically, it says in this press 13 release, "The study, funded by Searle and Pfizer 14 Incorporated, found that Celebrex patients 15 experienced significantly fewer symptomatic GI 16 ulcers and ulcer complications compared with 17 ibuprofen or diclofenac." 18 I mean, so that gives the impression that 19 they have successfully distinguished themselves 20 from traditional NSAIDs. And that statement is a 21 false statement, because we know that they did not 22 significantly differentiate themselves from 23 diclofenac. 24 Q. But it was known -- 25 A. And that's just one example of how these</p>	<p style="text-align: right;">Page 308</p> <p>1 And it didn't. It did not establish 2 itself to be statistically significantly safer in 3 this study than diclofenac. And the nonaspirin 4 primary end point pooled comparator result did not 5 -- was not -- was not valid -- was not validly 6 successful for Celebrex over the full data period. 7 Q. Was there any confusion at all in the 8 market that the primary end point wasn't met in 9 CLASS? 10 MR. SAHAM: Objection to form. Asked and 11 answered. 12 A. If you're restricting the question to just 13 the primary end point, I think it's pretty clear 14 that people knew the primary end point was missed. 15 But it's the, However, all these other 16 things were satisfied, when, in fact, those other 17 things were not satisfied is what this case is all 18 about. 19 Q. The fact that CLASS had missed its primary 20 end point, that's a significant fact? 21 A. It's important, sure. 22 Q. People are -- 23 A. But you know, they -- it's tempered by 24 the, However, we're better than traditional NSAIDs 25 when, in fact, you're not.</p>
<p style="text-align: right;">Page 307</p> <p>1 statements are false and misleading and give a 2 false and misleading, overly-optimistic rendition 3 of how the study played out. 4 Q. Well, can you answer whether it was known 5 in the market that CLASS didn't meet its primary 6 end point in April of 2000? 7 MR. SAHAM: Objection. Asked and 8 answered. 9 A. That was known. But all of the 10 information that I describe in Paragraph 45 of my 11 report was not known until the beginning of the 12 disclosures in February of 2001. 13 Q. And was it also known in May of 2000 that 14 the primary end point hadn't been met with CLASS? 15 MR. SAHAM: Objection. Asked and 16 answered. 17 A. In May of 2000? Yes, of course, 'cause -- 18 because the disclosure didn't begin until February 19 6, 2001. 20 So the primary end point is -- I mean... 21 Q. Was the market -- 22 A. I mean the gist of -- not -- the gist of 23 this, but what they say in words is that, 24 notwithstanding that particular fact, however, 25 Celebrex succeeded on all these other metrics.</p>	<p style="text-align: right;">Page 309</p> <p>1 They described it as a 13-month study, but 2 they only give six-month results. I mean, that's 3 why it's false and misleading -- the press release 4 and all these company statements subsequent to it 5 until February -- well, frankly, through February 6 6, if you look at company statements -- February 6 7 of 2001. But the market begins to learn -- on 8 February 6th -- the truth -- 9 Q. And the market understood -- 10 A. -- on February -- yes. 11 Q. -- throughout the class period the 12 significance of the fact that CLASS had missed its 13 primary end point. 14 A. I'm sorry. 15 Q. Do you agree that the market understood 16 the significance of the fact that CLASS had missed 17 its primary end point? 18 MR. SAHAM: Objection to form. Vague and 19 ambiguous. 20 A. Well, I think the -- what happened is the 21 market downplayed the significance of that, because 22 of the other false and misleading statements in the 23 press release. 24 I think they -- they seriously downplayed 25 that.</p>

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<p style="text-align: right;">Page 310</p> <p>1 Q. Now, you mentioned at several points 2 earlier that the GI label was not removed, correct? 3 A. GI -- 4 MR. SAHAM: Objection to form. 5 A. GI warning. 6 Q. GI warning -- yeah -- on -- on Celebrex 7 has never been removed. 8 MR. SAHAM: Objection to form. 9 A. I didn't hear you. You trailed off. 10 Q. Yeah. Sure. Was it a significant fact, 11 in your opinion, that the GI label was not removed? 12 A. When? 13 Q. In April -- in February of 2001. 14 MR. SAHAM: Objection to form. 15 A. Well, it -- no. The significant fact is 16 the -- the data that made inevitable the decision 17 of the advisory committee regarding the 18 recommendation for a label change. That's what is 19 the significant fact. 20 Q. And that's the failure to meet the primary 21 end point? 22 A. No, that's -- if you look at Doctor 23 Goldkind's presentation, he doesn't base his 24 decision in his analysis specifically on that -- on 25 -- only on that.</p>	<p style="text-align: right;">Page 312</p> <p>1 answered. 2 A. Clearly was a consideration. But the 3 failure of Celebrex to differentiate itself from 4 NSAIDs was more pervasive, was -- extended beyond 5 even that failure. 6 Q. Celebrex was successful in launching in 7 1999 and successful in 2000, even notwithstanding 8 the GI warning label on it; is that correct? 9 A. Right. But what analysts were expecting 10 or what analysts were -- were considering would 11 happen is an acceleration of sales going forward, 12 because they understood that payers needed more 13 justification for covering a much more expensive 14 drug. 15 Q. And that expectation was reflected in 16 reports and materials that were published prior to 17 the class period, correct? 18 A. Which expectation? 19 Q. The one you described. 20 A. No. I think -- 21 Q. The expectation that analysts had of 22 acceleration of sales going forward. 23 A. Analysts understood that there could be an 24 acceleration of sales if there was support from a 25 -- from a clinical study differentiating Celebrex</p>
<p style="text-align: right;">Page 311</p> <p>1 I mean, on the page where it says, 2 "Overall Conclusions," which is Bates stamped 3 Defendants' 03824229, he says, "No difference was 4 seen between Celebrex and diclofenac." 5 He doesn't say it's only because they 6 missed the primary end point. He says, "No 7 difference was seen between Celebrex and 8 diclofenac." And that's something that had not 9 been -- well, prior to February 6th -- made known 10 publicly. 11 Beyond that, if we look at Doctor 12 Goldkind's presentation, he says, "No conclusions 13 regarding safety of Celebrex compared to a 14 traditional less-selective COX inhibitor as a group 15 are possible." 16 So it looks like he was being generous. 17 He was looking beyond the primary end point. But 18 even looking beyond the primary end point, could 19 find no justification for a meaningful label 20 change. 21 Q. So you wouldn't agree with the statement 22 that the rejection of the label change was based on 23 the failure to meet the primary end point? 24 MR. SAHAM: Objection. Asked and 25 answered. Misstates. Well, objection. Asked and</p>	<p style="text-align: right;">Page 313</p> <p>1 from the traditional NSAIDs and removal of the 2 traditional NSAID warning label from Celebrex. 3 Q. Are you aware that, although CLASS didn't 4 meet its primary end point, it -- it met the 5 combined end point, a secondary end point? 6 MR. SAHAM: Objection. Vague as to form. 7 A. It -- you represented that it met its 8 combined end point. Over what time period, six or 9 12 months of data? 10 Q. Over both time periods. 11 A. And with aspirin or without -- with 12 aspirin excluded? 13 Q. With aspirin excluded. 14 MR. SAHAM: Objection to form. Vague. 15 "Combined end point." 16 A. And "combined end point," by that you mean 17 complicated ulcers and -- and GI ulcers? GI ulcers 18 and ulcer complications? 19 Q. Complicated and symptomatic, correct. 20 A. Well, I -- I think the truth of the matter 21 is that over the 12-month period, it was not 22 significant. 23 Q. Even excluding GI -- aspirin users. 24 A. Hang on. (Witness reviews document.) 25 MR. SAHAM: Again, if you want to ask him</p>

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<p style="text-align: right;">Page 314</p> <p>1 about the data and the breakdowns of the data, why 2 don't you show him the data. 3 A. (Witness reviews documents.) 4 Q. Well, let me ask a different question: 5 Did you understand that the primary end point of -- 6 of the VIGOR studies was the combined end point of 7 -- of the Celebrex studies? 8 In other words, the primary end point of 9 VIGOR was symptomatic and complicated ulcers? 10 A. The prespecified clinical test protocol in 11 VIGOR identified as a primary end point, right, the 12 GI ulcers and ulcer complications. That's my 13 understanding, which was similar to what was, at 14 some point later, termed a secondary end point for 15 the CLASS study. 16 Oh, wait. So I was thinking about -- 17 MR. SAHAM: There's no question. I mean, 18 you answered the question. 19 THE WITNESS: Okay. 20 Q. Do you agree that it was known throughout 21 the class period that there was more than six 22 months of data in the CLASS study? 23 MR. SAHAM: Objection to the form. 24 A. Well, there -- there were -- there were 25 public statements that it was a 13-month study, but</p>	<p style="text-align: right;">Page 316</p> <p>1 fact. 2 Q. In your report you discuss a two-trader 3 damages model. 4 A. Yes. 5 Q. Has this ever been reviewed in a 6 peer-reviewed economics or finance journal? 7 A. Yeah. There's -- there's quite a number 8 of publications about these -- these trader models. 9 I cite many of them in my report. 10 Q. Can you point me to anyone who has 11 published in an economics or finance peer-reviewed 12 article. 13 A. (Witness reviews document.) On the bottom 14 of 79, I've got a number of -- of citations. 15 Q. Okay. And which one of these articles is 16 published in an economics or finance peer-reviewed 17 journal? 18 A. Finnerty and Pushner, Stanford Journal of 19 Law, Business, and Finance. 20 Q. You understand that that is a 21 peer-reviewed journal? 22 A. I believe it is. 23 Q. Do you have an understanding of the term 24 "peer reviewed"? 25 A. Yes.</p>
<p style="text-align: right;">Page 315</p> <p>1 that's not what, really, we need to focus on. 2 What we need to focus on is the market was 3 not informed about what took place in the span 4 between six months and 13 months. 5 They -- constantly the company would -- if 6 they even did mention that it was a 13-month study, 7 would still, nonetheless, present six-month 8 results; and that was misleading. 9 Q. Now, you say, if they did mention, it was 10 a 13-month study. 11 Was it or was it not mentioned in -- in -- 12 A. Well, sometimes they would mention it, and 13 sometimes they would not mention it. But I'm 14 saying the time that they did mention it, they 15 still printed only six-months results. That's 16 misleading. 17 For example, in the initial press release. 18 Q. In the initial press release it was 19 disclosed that it was a 13-month study? 20 A. But the 13 months of data was not -- 21 results from the 13 months of data were not 22 presented. So I mean, it's clearly misleading to 23 say that it's a 13-month study, and then present 24 six-month results. 25 That's what they did. I mean, it's a</p>	<p style="text-align: right;">Page 317</p> <p>1 Q. What do you understand that to mean? 2 A. There's a review by peers. 3 Q. As opposed to by, for example, students? 4 Or do you view students as your peers? 5 A. Well, usually it's -- alternative is 6 either an unreviewed or editor-reviewed. 7 Q. Anything else? 8 A. (Witness reviews document.) About the 9 legitimacy of this model and the peer -- 10 Q. No. No. 11 A. I mean, I know that this is the model that 12 people use for estimating damages in a wide variety 13 of contexts. In fact, this is the -- this is the 14 model that is used, for example, in this 15 gentleman's firm here, Cornerstone Research. 16 You know, Beaver, Malernee, and Keeley are 17 -- wrote this article while working at Cornerstone. 18 This is the model that's used for 19 preparing plans of allocation in virtually every 20 securities litigation case when there's a 21 settlement. This is -- this is the model that is 22 relied upon by people who wish to estimate the 23 magnitude of damages in a CLASS action securities 24 case. 25 Q. Okay. But can you cite any articles</p>

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<p style="text-align: right;">Page 318</p> <p>1 published in peer-reviewed journals which have 2 reviewed this? 3 A. These are the articles I'm citing on Page 4 79. 5 Q. And can you identify any that are reviewed 6 by finance or economics professionals? 7 A. You know, I just don't know. Long 8 contemporary problems? Maybe. We can check to see 9 who they are, whether it's editor reviewed or peer 10 reviewed. 11 Q. Do you know for a fact that the Stanford 12 Journal of Law, Business, and Finance is -- 13 reviewed by peers of you in the finance and/or 14 economics fields? 15 A. I don't know. We can check. But I mean, 16 even -- if you look at the authors, I mean, Barclay 17 and Torchio -- Barclay, I mean, before his untimely 18 and unfortunate demise, was a very well-respected 19 professor at -- at University of Rochester. 20 Beaver is a very well-respected academic. 21 They're all writing about this particular model. 22 Finnerty is a very well-respected 23 academic. 24 So these -- these -- these are 25 well-respected authorities in the field of finance</p>	<p style="text-align: right;">Page 320</p> <p>1 have, and observed that, on the basis of the 2 holdings and apparent trades of the institutions, 3 this estimate that is derived from the two-trader 4 model is very conservative, very low. In fact, 5 probably represents a lower bound to the damages. 6 So I compared it against observable 7 economic data that specifically represents holding 8 and trading of Pharmacia stock specifically over 9 the class period that we're -- for this case. 10 Q. Okay. And you -- you assumed, as part of 11 your model, that 15 percent of Pharmacia's shares 12 were held by traders; the rest by holders. 13 What did you do to confirm the validity of 14 that assumption? 15 A. Again, that parameter is the common 16 parameter that's generally used for this model. 17 But beyond that, using that parameter, I arrived at 18 the damage numbers that are presented in my report; 19 and then I compared that to the damage numbers that 20 can be computed from the institutional trading 21 data, and found that the institutional trading data 22 damages were much higher. 23 Q. What did you do -- 24 A. So -- so that confirms that -- I mean, 25 what I'm opining about is what is the output from</p>
<p style="text-align: right;">Page 319</p> <p>1 who acknowledge that this is the model that is used 2 for estimating damages. 3 Q. You used the model and parameter estimates 4 presented by the Beaver, et al. What did you do to 5 test to see if those estimates and parameters fit 6 the specific case we have here? 7 A. I did what almost everybody else who uses 8 this model to arrive at an estimate of damages, I 9 -- I mean, the most common parameter is what they 10 call an 80/20 model, which conforms to the 11 parameters that I used, which is based on empirical 12 work presented in the Beaver study. 13 Q. Empirical work about Pharmacia? 14 A. No. Clearly, I mean empirical work would 15 have been done prior to this current case if it's 16 an existing published manuscript. 17 But I did what others who present 18 estimates of aggregate damages generally do, which 19 is, assumed that these -- that these parameters, 20 which were drawn from empirical work, continued to 21 apply. 22 Q. And what did you do to confirm that these 23 parameters appropriately fit the Pharmacia data? 24 A. Well, I compared the output of the model 25 to a -- to institutional trading data, which we</p>	<p style="text-align: right;">Page 321</p> <p>1 the most-commonly-used damage model, the 2 most-commonly-used aggregate damage model; and what 3 I'm able to opine about is the output from the 4 most-commonly-used aggregate damage model is very 5 conservative relative to the damages that are 6 apparent in the institutional trading data. 7 Q. Did you do anything at all to determine 8 whether or not the figure you used, 15.3 percent, 9 accurately reflects the percentage of -- well, 10 strike that. 11 Did you do anything at all to confirm that 12 your assumption that 15.3 percent of outstanding 13 Pharmacia shares were held by traders and the rest 14 by holders -- 15 A. Yes. 16 Q. -- is true of Pharmacia? 17 A. Yes. 18 Q. What did you do to confirm that there is 19 15. -- that Pharmacia stock is held 15.3 percent by 20 traders? 21 A. No. What I confirmed was that applying 22 that most-commonly-used parameter value to this 23 most commonly-used model produces a -- an aggregate 24 damage number which has to be a lower bound to the 25 actual damages suffered by investors in Pharmacia</p>

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<p style="text-align: right;">Page 322</p> <p>1 stock over the course of the class period.</p> <p>2 Q. Well, that wasn't my question.</p> <p>3 My question was, what did you do to</p> <p>4 confirm your assumption that 15.3 percent of all</p> <p>5 Pharmacia shares are held by traders?</p> <p>6 A. Well, I'm not opining that 15.3 percent</p> <p>7 were held. I'm opining that 15.3 percent, if used</p> <p>8 as the parameter value in the most-commonly-used</p> <p>9 aggregate damage model, produces a very</p> <p>10 conservative measure of aggregate damages, which,</p> <p>11 compared to the ag -- to the institutional holdings</p> <p>12 data, necessarily would represent a -- a lower</p> <p>13 bound for aggregate damages. It's a conservative</p> <p>14 estimate.</p> <p>15 Q. So what analysis --</p> <p>16 A. So let me -- my opinion here is about --</p> <p>17 I was asked to provide an estimate. I mean, my</p> <p>18 opinion here is, what is the estimate that comes</p> <p>19 out of the most-commonly-used aggregate damage</p> <p>20 model? And that's the number I put here.</p> <p>21 And then I do further analysis to prove</p> <p>22 that that's got to be a conservative estimate, and</p> <p>23 probably a lower bound aggregate damages suffered</p> <p>24 by investors.</p> <p>25 Q. Did you do any analysis to determine</p>	<p style="text-align: right;">Page 324</p> <p>1 you higher damage numbers. So you know, even</p> <p>2 within the context of the model, not comparing it</p> <p>3 to an institutional trading damage model, we see</p> <p>4 that the parameter -- that these parameter</p> <p>5 choices -- although they might not be correct --</p> <p>6 they are conservative in terms of the aggregate</p> <p>7 damage estimate that's produced by the model.</p> <p>8 Q. This table has nothing to do with the</p> <p>9 number of times more likely a trader share is to be</p> <p>10 traded than a holder share.</p> <p>11 A. No, this is about the percent held by</p> <p>12 traders, right.</p> <p>13 Q. Right. I'm not talking about that. So if</p> <p>14 you assume that traders traded a thousand times --</p> <p>15 strike that.</p> <p>16 If you assume that Pharmacia traders</p> <p>17 traded a thousand times more than holders, your</p> <p>18 damages figure would be far less, right?</p> <p>19 A. And you would know that you've got a lower</p> <p>20 lower bound, which is not really very</p> <p>21 informative -- a lower lower bound.</p> <p>22 The institutional trading model is much</p> <p>23 higher than the output of the trading of the -- the</p> <p>24 institutional model. The institutional -- the</p> <p>25 observed Vickers institutional holdings data</p>
<p style="text-align: right;">Page 323</p> <p>1 whether Pharmacia trader shares, in fact, are 29</p> <p>2 times more likely to be traded than holders'</p> <p>3 shares?</p> <p>4 A. Yes, I -- exactly the same thing that I</p> <p>5 just talked about. That, again, is a parameter</p> <p>6 estimate or an estimate of a parameter value from</p> <p>7 empirical research -- from Cornerstone itself --</p> <p>8 (indicating); and when I use that parameter</p> <p>9 estimate, and then compare the output from the</p> <p>10 model that I use it in -- which is the model that's</p> <p>11 most commonly used -- I found that the output --</p> <p>12 that the estimated damages is very conservative,</p> <p>13 compared to aggregate damages estimated by an</p> <p>14 institutional trading model.</p> <p>15 Q. What did you do to confirm that Pharmacia</p> <p>16 traders are 29 times more likely to trade than</p> <p>17 holders?</p> <p>18 A. I'm -- I'm not opining that they are.</p> <p>19 What I'm opining is that using that parameter value</p> <p>20 produces a conservative damage estimate. And in</p> <p>21 fact, you know, I say that in the report. So you</p> <p>22 can see it in the report.</p> <p>23 In fact, if you look at the report, you</p> <p>24 can see on -- (witness reviews document) -- Page 83</p> <p>25 that other parameter values give you lower -- give</p>	<p style="text-align: right;">Page 325</p> <p>1 indicates that damages were higher than even the</p> <p>2 output from the two-trader model with these</p> <p>3 conservative parameter assumptions.</p> <p>4 Q. Now, on the institutional holdings data,</p> <p>5 you don't have data on what specific day within any</p> <p>6 given quarter institutions traded, correct?</p> <p>7 A. That's right. That's inferred two ways:</p> <p>8 By looking at the changes in the holdings, which,</p> <p>9 again, is a conservative method, because trading</p> <p>10 could actually be more active than the net change</p> <p>11 in holdings over the course of a quarter.</p> <p>12 So one is to look at the changes in the</p> <p>13 holdings by each institution; and the other is to</p> <p>14 make sure that that trading record conforms to the</p> <p>15 levels of volume for the market as a whole.</p> <p>16 And then, thirdly, another -- a third</p> <p>17 conservative attribute of -- of my methodology for</p> <p>18 providing an estimate of aggregate damages is the</p> <p>19 institutional holdings data produces a number -- an</p> <p>20 estimate of damages that not only is higher than</p> <p>21 the two-trader model, but it's higher, even not</p> <p>22 scaling it up by the ratio of total investors to</p> <p>23 institutional investors.</p> <p>24 So we know that institutional investors</p> <p>25 was only a segment of the market. But even only</p>

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<p style="text-align: right;">Page 326</p> <p>1 looking at the institutions -- without looking at 2 smaller institutions, and looking at individuals -- 3 the estimate is -- the estimate from that model is 4 much higher than the two-trader model. 5 So I have a high degree of professional 6 certainty that the output from the two-trader model 7 that I employed, which is the same two-trader model 8 that almost everybody employs when they're drafting 9 plans of allocation or involved in settlement 10 talks -- whether they work for Cornerstone or 11 Analysis Group or Crowninshield -- is -- is very 12 conservative. 13 I was asked to provide an estimate. I 14 used the most-commonly-used model to provide an 15 extremely conservative estimate. 16 VIDEO OPERATOR: There are five minutes 17 remaining on the record. 18 Q. Can you cite any articles which are 19 published in peer-reviewed journals that review the 20 institutional holdings model that you describe? 21 A. As I sit here right now, no. I -- that 22 doesn't -- I do believe there is something out 23 there. I know that the folks over at NERA are 24 working on embellishing, essentially, what I have 25 here as -- you know, for an institutional trading</p>	<p style="text-align: right;">Page 328</p> <p>1 generally-accepted approaches to, you know, how to 2 read Vickers data, and similar to what's in the 3 Bassin and Finnerty and Pushner making -- and also 4 the work being done at NERA -- making inferences 5 about changes in holdings. 6 Q. And isn't it clearly the case that the 7 claims process will provide a more reliable 8 estimate of damages? 9 A. Not really, because the problem with the 10 claims process is that there are many people who 11 just choose not to make a claim, it seems. And 12 whereas, I'm estimating here what -- I'm providing 13 here an estimate. I'm showing what the 14 most-commonly-used model would provide for an 15 estimate for total damages on the assumption that 16 everybody who was damaged makes a claim. 17 The actual claims process may be 18 underestimating total damages on account of those 19 particular investors who choose not to make claims. 20 Q. The institutional holding data doesn't 21 tell you whether or not an institution held 22 Pharmacia stock through the February 6th to 8th 23 time period, correct? 24 You can't determine that from that data? 25 A. You can infer it. If they had -- if they</p>
<p style="text-align: right;">Page 327</p> <p>1 model. 2 But I do know -- actually, that's not 3 true. Think about it some more. 4 The Bassin model uses the institutional 5 data in a method similar to what I use, and I 6 believe Finnerty and Pushner also consider it. 7 Q. Are you aware of any courts that have 8 approved the institutional holdings model as a 9 basis for estimating damages? 10 A. I mean, let's be clear. This is not an 11 extravagant model. I mean, this is looking at 12 institutional holdings to see how institutional 13 holdings changed over the course of the class 14 period, and then comparing that to how the 15 inflation would have been changed over -- over 16 their holdings. 17 And if it's apparent that they bought and 18 then sold over a period of time when inflation was 19 high and then was low, it's easy to calculate -- 20 for those particular institutions -- what their 21 damages are. 22 It's essentially mimicking the claims 23 process. So we're not talking about some 24 extravagant model in a -- that reasonable academics 25 would take issue with. This is based on</p>	<p style="text-align: right;">Page 329</p> <p>1 held the same amount at the end of the quarter 2 prior to that date that they held at the end of the 3 quarter after that date, it's a reasonable 4 inference that they held it on that date. 5 Q. But you don't know that for certain. You 6 can't -- 7 A. You don't know for certain, but when you 8 average across many, many institutions -- as is 9 done here -- it's a reasonable conclusion, based on 10 the numbers. And I do want to add, just for the 11 record, that the two-trader model is an application 12 of the representative agent model, which is 13 generally accepted and widely used for -- in 14 academic research in a number of varieties. 15 It's one particular type of representative 16 agent model. So there's a lot of published work 17 based on models similar. 18 MR. WANG: Why don't we go off the record. 19 I want to check the time. 20 VIDEO OPERATOR: The time is 6:01. We are 21 now off the record. 22 (Feinstein 1007, multipage document.) 23 MR. WANG: So for the record, we've marked 24 as Exhibit 1007 a compilation of documents which 25 was brought with Professor Feinstein to this</p>

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<p>1 deposition, and some of which he referred to from</p> <p>2 time to time during the -- during the deposition;</p> <p>3 is that correct?</p> <p>4 MR. SAHAM: Yes.</p> <p>5 MR. WANG: And just to be clear, it's a</p> <p>6 compilation of documents, all of which we've marked</p> <p>7 as a single exhibit, for convenience's sake, and</p> <p>8 it's got a bunch of stamps --</p> <p>9 MR. SAHAM: It's got -- one clarification:</p> <p>10 Some of the documents in there have previously been</p> <p>11 marked as exhibits and have a sticker on some of</p> <p>12 them.</p> <p>13 (Whereupon the deposition ended at</p> <p>14 6:04 p.m.)</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 Commonwealth of Massachusetts</p> <p>2 Middlesex, ss.</p> <p>3</p> <p>4</p> <p>5 I, P. Jodi Ohnemus, Notary Public</p> <p>6 in and for the Commonwealth of Massachusetts,</p> <p>7 do hereby certify that there came before me</p> <p>8 on the 19th day of October, 2011, the deponent</p> <p>9 herein, who was duly sworn by me; that the ensuing</p> <p>10 examination upon oath of the said deponent was</p> <p>11 reported stenographically by me and transcribed</p> <p>12 into typewriting under my direction and control;</p> <p>13 and that the within transcript is a true record of</p> <p>14 the questions asked and answers given at said</p> <p>15 deposition.</p> <p>16</p> <p>17 I FURTHER CERTIFY that I am neither</p> <p>18 attorney nor counsel for, nor related to or</p> <p>19 employed by any of the parties to the action</p> <p>20 in which this deposition is taken; and, further,</p> <p>21 that I am not a relative or employee of any</p> <p>22 attorney or financially interested in the outcome</p> <p>23 of the action.</p> <p>24</p> <p>25</p> <p>IN WITNESS WHEREOF I have hereunto set my</p> <p>hand and affixed my seal of office this</p> <p>20th day of October, 2011, at Waltham.</p> <p>_____</p> <p>_____</p> <p>P. Jodi Ohnemus, RPR, RMR, CRR</p> <p>CSR, Notary Public,</p> <p>Commonwealth</p> <p>of Massachusetts</p> <p>My Commission Expires:</p> <p>3/28/2014</p>
Page 331	Page 333
<p>1 CERTIFICATE OF DEPONENT</p> <p>2</p> <p>3 I have read the foregoing transcript of</p> <p>4 my deposition and except for any corrections or</p> <p>5 changes noted on the errata sheet, I hereby</p> <p>6 subscribe to the transcript as an accurate record</p> <p>7 of the statements made by me.</p> <p>8</p> <p>9 _____</p> <p>10 STEVEN P. FEINSTEIN, PhD</p> <p>11</p> <p>12 SUBSCRIBED AND SWORN before and to me</p> <p>13 this ____ day of _____, 20__.</p> <p>14</p> <p>15 _____</p> <p>16 NOTARY PUBLIC</p> <p>17</p> <p>18</p> <p>19</p> <p>20 My Commission expires:</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 E R R A T A S H E E T</p> <p>2 IN RE: ALASKA ELECTRICAL V. PHARMACIA CORPORATION</p> <p>3 DATE: OCTOBER 19, 2011</p> <p>4 PAGE LINE CORRECTION AND REASON</p> <p>5 _____</p> <p>6 _____</p> <p>7 _____</p> <p>8 _____</p> <p>9 _____</p> <p>10 _____</p> <p>11 _____</p> <p>12 _____</p> <p>13 _____</p> <p>14 _____</p> <p>15 _____</p> <p>16 _____</p> <p>17 _____</p> <p>18 _____</p> <p>19 _____</p> <p>20 _____</p> <p>21 _____</p> <p>22 _____</p> <p>23 _____</p> <p>24 _____</p> <p>25 (DATE) STEVEN P. FEINSTEIN, PhD</p>

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EXHIBIT 82

**PHARMACIA/PFIZER INC
STATEMENT ON THE FDA ARTHRITIS ADVISORY COMMITTEE
MEETING**

February 7, 2001
Gaithersburg, MD

Previous studies comparing CELEBREX® (celecoxib capsules) to traditional NSAIDs in approximately 20,000 patients, post-marketing surveillance in more than 12 million patients and nearly 2 million patient-years of exposure have demonstrated that CELEBREX is effective, well tolerated and offers an excellent GI safety profile.

We believe the data from the Celecoxib Long-term Arthritis Safety Study (CLASS) present a compelling case to warrant inclusion of the CLASS data in the CELEBREX label. This was an extremely rigorous and complex trial, which made it difficult for the committee to analyze.

The Arthritis Advisory Committee's recommendation is an important piece of input, but since this is part of an ongoing process, we will continue to conduct label discussions with the FDA supporting a label revision. Discussions moving forward with the FDA will allow full analysis and assessment of these important and meaningful data.

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